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CELEBERRIMÆ ACADEMIÆ

OXONIENSI,

QUICQUID EST

ARTIUM ET SCIENTIÆ,

RELIGIONIS ET LITERARUM,

BENIGNISSIME FOVENTI,

SEXTUM HUNC

NATURÆ VIVARII

FASCICULUM,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO
THE UNIVERSITY
OF
OXFORD,
THE FRIEND OF SCIENCE,
THE GUARDIAN OF
RELIGION AND LITERATURE,
THIS SIXTH VOLUME
OF THE
NATURALISTS'S MISCELLANY
IS

MOST RESPECTFULLY INSCRIBED,

BY
GEORGE SHAW,
FREDERICK P. NODDER.

RAMPHASTOS ERYTHRORHYN- CHOS.



CHARACTER GENERICUS.

Rostrum maximum, inane, convexum, extrorsum
ferratum: mandibula utraque apice incurva.

Nares pone rostri basin.

Lingua pennacea.

Pedes scanforii plerisque.

Lin. Syst. Nat. p. 150.

CHARACTER SPECIFICUS, &c.

RAMPHASTOS nigricans, genis colloque sub-
tus albis, fascia pectoris crissoque coccineis,
uropygio sulphureo.

Lath. ind. orn. p. 136.

TUCANA cayanensis gutture albo.

Briss. 4. p. 416. 4. t. 31. f. 2.

Licet avibus quæ in hoc genere continentur mon-
strofa videatur et quasi incongrua esse rostri magni-
tudo, cum tamen levissima sit substantia, non pon-
dere iis officit, sed commode fatis sustinetur. In-

10558
figne præterea est in rostro ferraturas omnes antror-
sum fitas esse, ad retinendum quicquid arripitur
minus idoneas. Vescitur Ramphastorum genus ve-
getabilibus, nec ut falso opinati sunt nonnulli, rapax
est et prædatorium. Species quam describimus co-
lumbæ fere æqualis est. Nascitur, ut et aliæ con-
generes, in America Australi. Digna porro est lin-
gua quæ penitus examinetur ob miram et fere am-
biguam pennæ similitudinem. Hujus veram mag-
nitudinem cernere est in tabula.



S.N.

London Published Aug. 1833 by T. P. Nodder & Co.

No. 15, Beaver Street.

THE
RED-BEAKED TOUCAN.



GENERIC CHARACTER.

Bill excessively large, convex, bending towards the tip, light, hollow, ferrated.

Tongue long, narrow, feathered on the edges.

Feet formed for climbing.

SPECIFIC CHARACTER, &c.

GREENISH-BLACK TOUCAN, with cheeks and lower part of the neck white, pectoral band and vent crimson, the upper tail-coverts yellow.

RED-BEAKED TOUCAN.

Lath. Syn. 1. p. 328.

LE TOUCAN a gorge blanche de Cayenne.

Briss. orn. 4. p. 416. n. 4. pl. 31. f. 2.

The seemingly monstrous and disproportionate size of the beak in the birds of this genus is such as to excite our wonder at so incongruous an appearance. We are to consider, however, that the

substance of the beak in the Toucans is extremely flight, so that no inconvenience results to the bird from its weight. It is remarkable that the serratures of the beak in these birds are placed forwards, and are consequently not particularly calculated for holding any object which the bird may happen to seize. It may also be observed that the Toucans in general feed only on fruits and vegetable substances, and are not (as has sometimes been erroneously imagined) of a predacious nature. The size of the present species is nearly that of a pigeon. Like the rest of its congeners, it is a native of South America. It should be added that the structure of the tongue in the birds of this genus is so extremely curious as to be well worthy of particular attention; so exactly resembling a feather that at first sight it might be regarded as such. It is represented on the plate of the size of nature.

PHYSETER MACROCEPHALUS.



CHARACTER GENERICUS.

Dentes in maxilla inferiore.

Fistula in capite s. fronte.

Lin. Syst. Nat. p. 107.

CHARACTER SPECIFICUS, &c.

PHYSETER dorso impinni gibbofo.

BALÆNA MAJOR, in inferiore tantum maxilla dentata macrocephala bipinnis. Sibb.

Raj. pisc. p. 11. 15.

CETUS DENTATUS.

Mus. Worm. p. 280.

Animalium cetariorum characteres generales antea in hoc opere denotatos, cum scilicet de balæna Myfticeto differebamus, supervacaneum foret in hac specie describenda repetere. Maximus est Phyfeter Macrocephalus fui generis; nec pretiofior est alter, ex hoc enim proveniunt fpermaceti et ambarum. Deformior est vel ipfo Myfticeto. Caput enorme, fi cum corpore comparetur. Maxilla fuperior carens

rens dentibus recipit in cavis, ore clauso, quos plurimos continet maxilla inferior. Color fusco-pallescit, dorso obscuriore. Extrahitur spermaceti e cellulis osseis quæ in capite, recens fere liquidum, ab aere vero concrefcit et coagulatur. Qui ambarum in deliciis habent ægre forsan sibi persuadeant nihil aliud esse quam fæces animalis morbo laborantis. Sæpius accidit ut tempestatibus agantur in littora Europæa, nonnunquam in Britannica, variæ cetorum species. Hanc ipsam de qua jam loquimur, centum abhinc annis Norfolciæ appulsam memorat doctissimus Thomas Brown, quam mire cupidus erat examinandi si modo ambarum inveniret, de cujus origine paululum videtur dubitasse. Destitit autem ab incepto intolerabili foetore repulsus carnis quæ jam aliquot dies in littore jacuerat, nec quod nunc dierum certissimum est suo potuit experimento comprobare. Differit de hac re, ut solet, fortiter et nervose.

“ Quod audacter asserunt Arctici piscatores, balænas nempe ambarum deglutire, frustra que ejus in visceribus sæpius reperiri, vetuit me pro certo cognoscere qui se undique effudit nefandus foetor. At si verum sit quod docet Paracelsus, moschum odoratissimum e stercore extrahi posse, et e substantiis foedissime olentibus elici quod naribus sit jucundissimum, confidentur jurarent omnes quibus non esset nasus Vespasianus, e nulla aptiori materia felicem laboris exitum posse expectari.”



THE SPERMACETI WHALE.



GENERIC CHARACTER.

Teeth in the lower jaw only.

Fistula or respiratory pipe seated either on the head or the top of the snout.

SPECIFIC CHARACTER, &c.

PHYSETER with gibbose back without fin.

THE SPERMACETI WHALE.

BLUNT-HEADED CACHALOT.

Pennant. Brit. Zool. 3. p. 55.

The general characters of the cetaceous animals having already been given in the present work under the article of *Balæna Mysticetus*, it is unnecessary to recapitulate them in the description of the present species, which is the largest of its genus, and is one of the most interesting of the whole tribe; affording not only the well-known concrete called spermaceti, but likewise the valuable substance known by the name of ambergrease. This species is of an appearance still more uncouth than the
great

great Northern Whale or *Balæna Mysticetus*; the head being of an enormous magnitude in proportion to the body. The upper jaw is destitute of teeth: in the lower they are very numerous, and are received, when the mouth is closed, into corresponding cavities in the upper. The colour of this whale is a pale or whitish brown; darkest above. The substance called spermaceti is contained in peculiar cavities or bony cells in the head, and when recent is nearly liquid, but soon concretes on exposure to air. Ambergrease is (what perhaps few who are admirers of that perfume would easily imagine,) nothing more than the excrement of the animal in a diseased state. This species of whale, like others, is sometimes cast by tempests on the European coasts, and has been seen on our own. In the last century a very large one was stranded on the coast of Norfolk, which is particularly commemorated by Sir Thomas Brown, who seems to have been willing to have discovered ambergrease in it, but was repelled by the intolerable fætor of the animal, which had lain several days in a state of putrefaction. Sir Thomas recites the anecdote in his usual forcible style, and appears to have been rather in doubt of what is now well ascertained, viz. that the perfume above mentioned has really the origin before described.

“ In vain it was to rake for ambergriefe in the panch of this Leviathan, as Greenland discoverers, and attests of experience dictate, that they sometimes swallow great lumps thereof in the sea; insufferable

sufferable fætor denying that enquiry; and yet if, as Paracelsus encourageth, ordure makes the best musk, and from the most fetid substances may be drawn the most odoriferous effences, all that had not Vespasian's nose, might boldly fwear, here was a fit subject for such extractions."

SCOLOPENDRA MICROSCOPICA.



CHARACTER GENERICUS.

Pedes numerosi, totidem utrinque quot corporis
segmenta.

Antennæ fetaceæ.

Palpi duo articulati.

Corpus depressum.

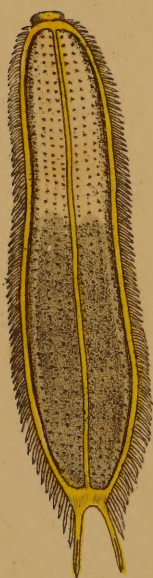
Lin. Syst. Nat. p. 1062.

CHARACTER SPECIFICUS.

SCOLOPENDRA PELLUCIDA PUNC-
TATA, margine laterali, stria dorsali, cau-
daque forficata aureis.

Cum ego paucis abhinc annis in accurata insecto-
rum plurium aquaticorum examinatione essem ver-
fatus, animalculum hoc rarissimum mense maio in
stagno sub turbido primum detexi. Nunquam antea
aut descripta aut depicta est species hæc tum aqua-
tica tum omnino microscopia. Equidem ad rigidam
scientiæ entomologicæ normam, nescio annon novum
huic genus instituisse fatius fuisset, quam ad scolo-
pendras referre: quibus tamen ut annumeretur ani-
malculum hoc nostrum magis placet, non modo ob
magnam

magnam affinitatem, sed quod in insecto adeo minuto ut quinquagesimam unciae partem paulo excedat, characterum discrimina vix ac ne vix possunt accurate investigari. Magnitudinem naturalem plus centies auctam repræsentat tabula. Lentius incedit scolopendra microscopica, membris tamen utitur prompte fatis, et sine impedimento.



THE
MICROSCOPIC SCOLOPENDRA.



GENERIC CHARACTER.

Feet numerous ; equal in number on each side to the segments of the body.

Antennæ setaceous.

Palpi two, jointed.

Body depressed.

SPECIFIC CHARACTER.

PELLUCID DOTTED SCOLOPENDRA,
with lateral margin, dorsal stripe, and forked
tail gold-coloured.

On examining a great variety of aquatic insects a few years ago, I first discovered this very curious animalcule in the water of a soft pond in the month of May. It has never before been either described or figured, and is here represented very highly magnified ; being entirely a microscopic species as well as an aquatic one. It might perhaps, strictly speaking, rather constitute a new genus than be referred to that of Scolopendra ; but as this is a matter which

which in an animalcule of scarce more than the fiftieth part of an inch in length can never be investigated with sufficient certainty, it is perhaps most advisable to place it under the genus Scolopendra, to which its appearance proves it so very nearly allied. The figure represents it magnified more than an hundred times in length. Its motions are rather flow, but accompanied with great freedom.

PSITTACUS FUNEREUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili;
cera instructa.

Nares in rostri basi.

Lingua carnosæ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS BRACHYURUS NIGER, cauda
medio melina nigro irrorata.

In eo præcipue differre videtur hæc avis a psittaco magnifico sive illo Bankii nomine insignito, quod media cauda non sit coccinea nigro fasciata, sed melina, punctulis parvulis nigris creberrime irrorata. Superat quoque magnitudine psittacum Bankii, nec, re bene perpensa, restat dubium quin species sit vere distincta. Nunquam antehac physicis Europæis innotuit; attulerunt nempe eum ad nos cum aliis nonnullis prius incognitis aves ab Australia nuperrime reversæ.

THE
FUNEREAL COCKATOO.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.
Nostrils round, placed in the base of the bill.
Tongue fleshy, broad, blunt at the end.
Legs short. Toes formed for climbing, viz. two
toes forward, and two backward.

SPECIFIC CHARACTER.

EVEN-TAILED BLACK COCKATOO, with
the middle of the tail straw-coloured, freck-
led with black.

The general appearance of this bird is so very similar to that of the magnificent or Bankian Cockatoo, that the chief circumstance in which it differs is the colour of the middle part of the tail; which instead of being red barred with black, as in that bird, is of a dull straw-colour, thickly sprinkled with small specks of black. The size of the bird is also superior to that of the Bankian, and upon the whole there can be no doubt of its constituting a distinct species. It is perfectly new, having been imported with other recently discovered birds in the last vessels from New Holland.



A.

*London, Published Sep^r 1791, by F. P. Nodder & Co.**N^o 15 Broad Street*

ACARUS LEPIDOPTERORUM.



CHARACTER GENERICUS.

Pedes octo.

Oculi duo ad latera capitis.

Tentacula duo articulata, pediformia.

Lin. Syst. Nat. p. 1022.

CHARACTER SPECIFICUS.

ACARUS ovatus subferrugineus, antice acuminatus, abdomine femoribusque setis sparsis in-
crassatis, tarsis adactylis longissimis setaceis.

Insectum, nunquam fortasse antea descriptum, quodque microscopio auctum, depingitur, detectum est cum multis ejusmodi parti inferiori alarum phalænæ arcte adeo adhærentibus, ut puncta potius ipsius alæ quam aliquid ab ea distinctum putares; nec nisi attento oculo propius adducto patebat ea acaros esse. Ope microscopii facto examine, comperi speciem non antea visam, quaque dubito an totum genus contineat mirabiliorem. Magnitudine vix acarum fironem seu vulgarem superat. Corpus ovatum, depressum, parte antica acuminatum. Crura gracil-

gracillima; primo et secundo articulo fetis crassis obfuso, quæ gradatim dilatantur versus extremitates, auctæque admodum microscopio per totam longitudinem ferratæ videntur more aristarum hordeacearum. Cæteri articuli fetis longissimis acuminatis vestiuntur; ultimi autem seu tarfi non muniuntur uncis unguibus, quod plerisque acaris commune est, sed in tres longissimos, rectos et acutos pilos designant, ut in tabula exprimitur. Corpus aspergitur variis pilis crassis, quales sunt ii in articulis crurum primoribus. Palpi, seu partes cheliformes juxta caput crassissimæ et validæ terminantur singulæ ungue longo, curvo, acuto, et setigero. Crura anteriora cæteris longiora. Mire comparatum est a natura hoc insectum ad vivendum sub alis Lepidopterorum; longa enim et gracilia crura facile inter alarum squamas insinuantur, efficiuntque setæ ferratæ ut arctius adhærere possit, et a casu sit securius, cum alis celerrime vibratis volet phalæna. Militat phalæna super quam inventus est acarus inter illas quas Linnæus *rusticas* vocavit; videtur tamen esse inter species ab illo non descriptas. Magnitudinis est modicæ, alis superioribus e cinereo albentibus, inferioribus lacteis, fusco marginatis.



THE
LEPIDOPTERINE MITE.



GENERIC CHARACTER.

Eight *Legs*.

Two *Eyes*, situated on the sides of the head.

Two *Tentacula*, jointed, and shaped like feet.

SPECIFIC CHARACTER.

OVATE SHARP-FRONTED SUBFERRUGINOUS ACARUS, with incrassated bristles on the body and thighs, and extremely long fetiform feet.

This very remarkable insect, which has probably never before been described, and of which a microscopical figure is here given, was discovered, together with several others of the same species on the lower surface of the wings of a moth. They were affixed so closely as to appear rather like natural specks than extraneous objects, and it was not without a near and attentive survey that they were discovered to be acari. Their colour was a reddish brown

brown and their surface somewhat lucid. On examination by the microscope, I found that the species was different from any I had before examined. It is perhaps one of the most curious of the whole genus. In size it scarce exceeds the acarus firo or common mite. The body is oval, depressed, and acuminated forwards. The legs are remarkably slender, and are beset on the first and second joints with strong bristles, gradually thickening towards their extremities, and which, when very much magnified, appear serrated throughout their whole length in the manner of the awns of barley, while the remaining joints are furnished with very long sharp-pointed ones; and the tarfi or ultimate joints, instead of being terminated by hooked claws, as in most other species, run out into three very long, strait, and sharp bristles, as represented in the figure. On the body are placed several bristles of the same form with those on the upper joints of the legs. The palpi or cheliform parts near the head are very thick and strong, each being terminated by a sharp, long, incurved claw or process, accompanied by several bristles. The fore legs exceed the others in length. This insect seems admirably calculated for its peculiar habitat on the wings of lepidopterous insects; its long and slender legs readily insinuating themselves amongst the scales of the wings, and the serrated bristles undoubtedly contributing to its closer adhesion, and securing it from being shaken off the wing during the insect's flight. The moth on which this curious acarus was discovered is amongst the phalænæ rusticæ of Linnaeus,

næus, but is probably not a Linnæan species. It is of a middling size, with the upper wings of a cinereous whitish colour, and the lower ones milk white, bordered with brown.

SERPULA PERFORATA.



CHARACTER GENERICUS.

Animal Terebella.

Testa univalvis, tubulosa, adhærens, (sæpe isthmis integris passim intercepta.)

Lin. Syst. Nat. p. 1264.

CHARACTER SPECIFICUS, &c.

SERPULA testa tereti recta, extremitate radiata ;
disco poris cylindricis.

Lin. Syst. Nat. p. 1267.

List. conch. t. 548. f. 3.

Rumpf. mus. t. 41. f. 7.

Gnalt. test. t. 10. f. M.

Mort. conch. 1. t. 1. f. 7.

Testam mire conformatam repræsentavimus, Serpulæ perforatæ nomine distinctam. Cum nesciatur quodnam eam animal incolat, difficile ideo est dicere cui usui inserviant foramina plurima in summa seu convexa parte sita, quam cingit et aliorum tubulorum circulus. Oceanum incolit Indicum Serpula

D

perforata,

perforata, eadem plerumque magnitudine, quam
ostendit tabula. Color eburneo-candidus in non-
nullis speciminibus levem quandam habet rubedinis
misturam.



THE
PERFORATED SERPULA.



GENERIC CHARACTER.

Animal resembling a Terebella.

Shell univalve, tubular, adhering commonly to other substances, (in many species intercepted internally by dissepiments at uncertain distances.)

SPECIFIC CHARACTER, &c.

STRAIT CYLINDRIC SERPULA, with radiated extremity: the disk perforated by cylindric pores.

L'ARROSOIR ou le Pinceau de mer.

Argenv. t. 3. fig. G.

Knorr. 4. t. 28. & 6. t. 40.

THE WATER-POT SERPULA.

The very singular structure and appearance of the present shell justly rank it amongst the more curious productions of nature. The inhabiting animal is unknown, and we are consequently unacquainted with

with the particular use of the numerous foramina on the convex surface of the upper part, as well as of the circle of tubular ones which surround it. It is a native of the Indian ocean, and is generally of the size represented on the plate. Its colour is an ivory white, with a slight tinge of reddish in some individuals.

MOTACILLA TROCHILUS.



CHARACTER GENERICUS.

Rostrum subulatum, rectum; mandibulis subæqualibus.

Nares ovatæ.

Lingua lacero-emarginata.

Lin. Syst. Nat. p. 328.

CHARACTER SPECIFICUS, &c.

MOTACILLA cinereo-virens, alis subtus tectricibus flavescens, superciliis luteis.

Lin. Syst. Nat. p. 338.

ASILUS.

Briss. 3. p. 479. 45.

Raii. syn. p. 80. A. 10.

Will. orn. p. 164.

REGULUS non cristatus.

Aldr. orn. p. 653.

Quod inter falices ut plurimum versetur Motacilla Trochilus, ea de causa a quibusdam Anglice nominata est *Willow-Wren*. Moribus modoque vivendi regulos communes et aureo-cristatos imitatur. Colore interdum variat: nonnulla scilicet specimina longe nitidius flavent.



London. Published Oct. 4. 1794. by F. & R. Nodder & Co. N. 15. Brewer Street.

THE
YELLOW WREN.



GENERIC CHARACTER.

Bill subulate (or awl-shaped); *strait*: the mandibles nearly equal.

Nostrils nearly oval.

Tongue jagged, or lacerated towards the tip.

SPECIFIC CHARACTER, &c.

ASH-GREEN MOTACILLA, with the wings beneath the coverts yellowish, and a streak of yellow over each eye.

YELLOW WARBLER.

Lath. syn. 2. p. 512.

THE GREEN WREN, YELLOW WREN,
OR WILLOW WREN.

The Motacilla Trochilus or Yellow-Wren, is mostly seen on willows, from which circumstance it has been sometimes called the willow-wren. In its manners and way of life it resembles the common and gold-crested wrens. It is subject to vary in point of colour, the yellow in some specimens being far brighter than in others.

LEPAS ANATIFERA.



CHARACTER GENERICUS.

Animal Triton.

Testa multivalvis, inæquivalvis, basi affixa.

Lin. Syst Nat. p. 1107.

CHARACTER SPECIFICUS, &c.

LEPAS testa compressa quinquevalvi lævi, intestino infidente.

Lin. Syst. Nat. p. 1109.

CONCHA ANATIFERA.

Aldr. orn. c. 20.

TELLINA PEDATA.

Bonann. recr. 2. f. 2.

CONCHA PEDATA.

Imper. hist. nat. 904.

Inter errores antiquos qui historiam naturalem plurimi obscurabant, passim credi solitum est anserem *Bernacle* vulgo dictum, non ut aliæ aves ab ovo, sed

sed a conchylio, in tabula annexa depicto, originem ducere. Huic errori, ingenti certe et manifesto, assenserunt varii auctores, quos ab anili credulitate prorsus immunes credere par esset. Putabant fane physici, illis temporibus, animal hanc testam incolens, avis supra memoratæ pullum esse implumem; elapsoque aliquo tempore, postquam plumis vestitus fuerit, e testa se liberasse, et in aquam subjacentem decidisse. Numerosa brachia seu tentacula velut plumosa et fimbriata, ordine semicirculari caput animalis cingentia, solum videntur fuisse fundamentum cui tam prava opinio et ridenda fabula posset inniti. Inter alios qui de concha hac anserifera scripserunt, suam ita sententiam profert Gerardus nostras, herbarii Anglicani auctor notissimus.

“ Quod autem propriis oculis vidimus, et propriis manibus tetigimus, id dicere pergimus. Est in Lancastræ insula quædam parva cui nomen *The Pile of Fowlders*; circa quam navium exesarum et naufragarum frustula diffracta inveniuntur, simul cum truncis et ramis arborum antiquarum ibidem jactatarum. Supra hæc frustula spuma quædam potest videri, quæ gradatim in formam testarum musculos referentium accrescit: hæ tamen testæ sunt magis quam musculi acuminatæ, et coloris albescentis. Intra testam invenitur substantia serico fimbriato et albido non absimilis, fibris inter se intertextis et complicatis. Hujus substantiæ pars una mediæ testæ innititur, velut corpus ostreæ seu mytili; pars autem reliqua ventri seu gibbæ parti massæ rudis et imperfectæ affixa est, quæ progressu tem-
poris

poris in formam avis effingitur. Cum plenam avis formam adepta sit, tunc concha hiat, primoque conspicitur fimbria quasi serica quam supra memoravimus: paulo post crura aviculæ dependentia cernuntur, quæ, mole sensim aucta, concham paulatim aperit, donec pleno corpore egressa, a rostro solo pendeat; elapsoque parvo tempore cum ad integram maturitatem jam pervenerit, in mare decedit, plumasque nacta, ad magnitudinem anate majorem, anserem minorem crescit; rostro pedibusque nigris, plumisque nigro alboque, more Picæ vulgaris nostratis, maculatis. Hanc avem Lancastriæ incolæ anserem arboreum constanter appellant. Insula prædicta, nec non alia loca vicina adeo his avibus scant, ut tribus denariis monetæ Anglicanæ una ex optimis facile ematur. Si qui sint qui de hac re adhuc dubitant, ad me, si placet, veniant, et testimonio hominum dignissimorum illis satisfaciam.”

Corpus Lepadis ad ovalem accedit formam, animali quod nomine Tritonis describit Linnæus, simillimum. Triton iste in foraminibus rupium habitat: Lepas igitur velut Triton concham incolens censenda est. Os Lepadis e proboscide incurva, longa constat; duodecim plumosis seu fimbriatis tentaculis vel brachiis cincta, quæ, ut supra dictum est, ab orificio testæ dependent. Cauda hujus animalis cum tubulo testæ congiungitur, et hoc modo affigitur substantiæ cui adhæret; seu potius pars ista tubulata est pars ipsius animalis; nam pro arbitrio, ut videtur, contrahi potest. Hæc Lepadis species fere in omnibus maris Mediterranei littoribus, in nostris

nostris etiam est frequentissima, imis navibus, nec non aliis rebus adhærens. Interdum unica tantum, interdum plures coacervatæ reperiuntur. Hujus generis aliæ variæ extant species, quarum aliæ Britanniae indigenæ sunt, aliæ transmarinæ.



N

London Published Oct. 1799. by J. P. Nodder & Co. No. 16 Brewer Street.

THE
DUCK BARNACLE.



GENERIC CHARACTER.

Animal resembling a Triton.

Shell consisting of several unequal valves; affixed
by its base.

SPECIFIC CHARACTER, &c.

PEDUNCULATED BARNACLE, with com-
pressed shell consisting of five valves.

THE ANATIFEROUS LEPAS, OR DUCK-
BEARING BARNACLE.

THE COMMON DUCK-BEARING BAR-
NACLE.

Ellis. Ph. Trans.

Amongst the numerous errors with which natural
history was formerly incumbered, there prevailed an
idea that the bird called the Barnacle-Goose was not
produced like other birds from an egg, but that it
derived

derived its origin from the shell represented in the annexed plate. This error, gross and absurd as it was, seems to have met with credit from authors who should have viewed objects of this nature with other eyes than those of the vulgar. It was supposed by these philosophers that the inhabitant of this shell was an immature bird, or young of the above-mentioned goose, which, after having attained its plumage, liberated itself from the confinement of its shell, and dropped into the water below. The numerous arms or tentacula of the inhabiting animal, which are disposed in a semicircular form, and are of a feathery appearance, seem to have been all that could reasonably be alledged in favor of this extraordinary hypothesis. Amongst others who have mentioned this supposed goose-bearing shell, is Gerard, the author of the well-known herbal. His account runs thus.

“ But what our eyes have seene, and hands have touched we shall declare. There is a small island in Lancashire called the Pile of Fowlders, wherein are found the broken pieces of old and bruised ships, some whereof have been cast thither by shipwrecke, and also the trunks and bodies, with the branches of old and rotten trees, cast up there likewise; whereon is found a certain spume or froth that in time breedeth unto certaine shells, in shape like those of the muskle, but sharper pointed, and of a whitish colour; wherein is contained a thing in form like a lace of silk finely woven as it were together, of a whitish colour; one end whereof is
fastened

fastened unto the inside of the shell, even as the fish of oysters and muskles are; the other end is made fast unto the belly of a rude masse or lumpe, which in time commeth unto the shape and form of a bird: when it is perfectly formed, the shell gapeth open, and the first thing that appeareth is the foresaid lace or string; next come the legs of the bird, hanging out, and as it groweth greater it openeth the shell by degrees, till at length it is all come forth, and hangeth onely by the bill: in a short space after it commeth to full maturitie and falleth into the sea, where it gathereth feathers, and groweth to fowle bigger than a mallard and lesser than a goose, having blacke legs and bill or beake, and feathers blacke and white, spotted in such manner as is our Mag-Pie, called in some places a Pie-Annet, which the people of Lancashire call by no other name than a tree goose: which place aforesaid, and all those parts adjoining, do so much abound therewith, that one of the best is bought for three pence. For the truth hereof if any do doubt, may it please them to repaire unto me, and I shall satisfie them by the testimonie of good witnesses.”

The body of the Lepas is of a form approaching to that of an oval, and extremely resembles the animal called by Linnæus a Triton, which is an inhabitant of the cavities of rocks. The Lepas may therefore be considered as a Triton inhabiting a shell. The mouth consists of a long proboscis, or bent tube, and is surrounded by twelve long, feathery tentacula, which, as before observed, hang out of the

the mouth of the shell. The tail of the animal has a communication with the tubular part by which it is affixed to the substance on which it adheres; or rather the tubular part may be said to constitute a part of the animal, since it has a contractile power at the pleasure of the creature. This species of *Lepas* is common on most of the coasts of the Mediterranean, and is frequently found on our own. It adheres to the bottoms of ships, and other substances, and is sometimes found single, and sometimes in clusters or groupes.

CORALLINA TUNA.



CHARACTER GENERICUS.

Animal? crescens habitu plantæ.

Stirps fixa. Rami articulati, ramulofi.

CHARACTER SPECIFICUS, &c.

CORALLINA trichotoma articulata, articulis compressis planis subrotundis.

Soland. et. Ellis. corall. p. 111.

t. 20. f. e.

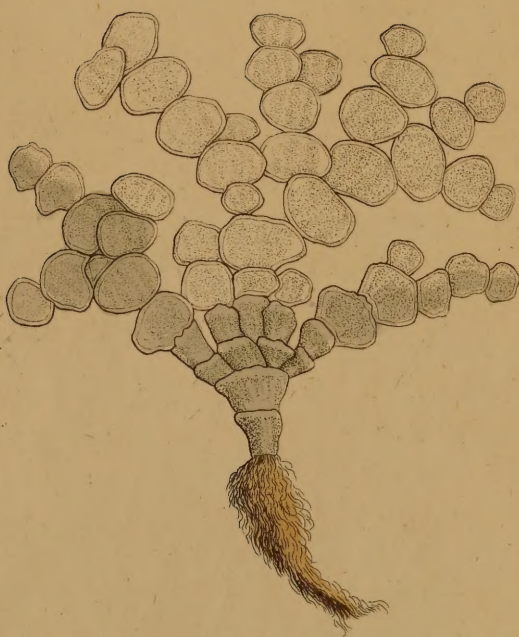
OPUNTIA MARINA.

Park. theat. p. 1294. fig. 12.

Mars. hist. mar. p. 65. t. 7. f. 31.

Evenit in nonnullis Corallinis ut geniculi, longe admodum progressi, totius lithophyti mensuræ male respondere videantur. Inter has est ea quæ Corallina Opuntia nominatur, quod scilicet crescat formeturque modo non longe abfimili Cacto Opuntiae Linnæi. Speciem autem quam depinximus distinguunt geniculi insigniter lati subrotundi, fere complanati,

planati, fingulo ramulo plerumque in tres minores
diviso. Corallina hæc raro paucis unciis longior,
videturque prodire a radice seu fasciculo fibrarum
more vegetabili. Profert eam mare Mediterra-
neum.



TUNA CORALLINE.



GENERIC CHARACTER.

Animal? growing in the form of a plant.

Stem fixed. Branches jointed and subdivided.

SPECIFIC CHARACTER, &c.

CORALLINE with trichotomous branches, and smooth, compressed, roundish joints.

ROUND-LEAVED CORALLINE.

ROUND-LEAVED OISTER-WEED.

Ger. Herb. p. 1567.

TUNA CORALLINE.

Soland. et Ellis. Zooph. p. 111.

Some species of Coralline are remarkable for the very great size of their jointed processes in proportion to the whole. Amongst these species is that called Corallina Opuntia, from some similitude between its mode of growth and habit to that of the Cactus Opuntia of Linnæus. The species here figured is however still more remarkable for the dispro-

disproportioned size of its geniculations, which are of a roundish shape, nearly flat, and grow in such a manner that each branch is commonly divided into three smaller ones. This coralline seldom exceeds a very few inches in height, and seems to proceed from a root or collection of filaments exactly in the manner of a vegetable. It is a native of the Mediterranean.

MOTACILLA PHOENICURUS.



CHARACTER GENERICUS.

Rostrum subulatum, rectum: mandibulis subæqualibus.

Nares obovatæ.

Lingua lacero-emarginata.

Lin. Syst. Nat. p. 328.

CHARACTER SPECIFICUS, &c.

MOTACILLA gula nigra, abdomine caudaque rufis, capite dorsoque canis.

Lin. Syst. Nat. p. 335.

RUTICILLA.

Gesn. av. 729.

Raii. syn. p. 78. A. 5.

Will. p. 159. t. 39.

Ver nostrum et æstatem amans formosa hæc avicula non brumam expectat, sed terras petit alio sole calentes. Indole esse creditur cauta admodum et meticulosa, fidemque hominum adeo suspectam habere, ut simul atque non fatis celari viderit, nidum statim deferat femina, præcipue si quis ova vel levissime tetigerit. Rem tamen se non ita semper ha-

bere certissimum est; probe enim memini egomet
exemplum prorsus contrarium; cum scilicet pullos
imperturbatæ fatis et tranquillæ aluerunt aves, licet
in casula hortensi nidificassent ubi plurima erat huc
illuc concursantium frequentia, ipsaque ova absente
femina, plus semel manu fuissent contrectata.



THE REDSTART.



GENERIC CHARACTER.

Bill subulate, strait ; mandibles nearly equal.

Nostrils nearly oval.

Tongue jagged, or lacerated towards the tip.

SPECIFIC CHARACTER, &c.

MOTACILLA, with black throat, white front,
rufous tail and abdomen, lead-coloured head
and back.

THE REDSTART.

LE ROSSIGNOL DE MURAILLE.

Briss. orn. 3. p. 403. No. 15.

Buf. ois. 5. p. 170. pl. 6. f. 2.

Pl. enl. 351. f. 1. 2.

This elegant bird, tho' common in England during the spring and summer, is of a migratory nature, and leaves the island before the commencement of the winter season. The Redstart is generally supposed to be of a peculiarly shy and unsocial disposition, and it has been said that the slightest observation or intrusion, especially if the eggs are

merely touched, will cause the female to forsake the nest. I recollect, however, one instance of an entirely different nature; in which a redstart's nest was built in a small summer-house immediately adjoining to a dwelling-house, and where many of the family frequently came during the greater part of the day: yet the birds continued their operations without any apparent embarrassment, and reared their offspring with perfect composure. I might also add that the eggs were more than once examined and displaced during the absence of the female.

CYPRÆA PARDALIS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, involuta, subovata, obtusa, lævis.

Apertura utrinque effusa, linearis, utrinque dentata, longitudinalis.

Lin. Syst. Nat. p. 1172.

CHARACTER SPECIFICUS, &c.

CYPRÆA FERRUGINEA, fusco guttata, linea dorsi testacea, subtus alba.

CYPRÆA testa ovata, postice obtusa, antice rotundata, linea longitudinali testacea.

Lin. Syst. Nat. p. 1176.

PORCELLANA GUTTATA.

Rumph. mus. t. 38. f. A.

CYPRÆA TIGRIS.

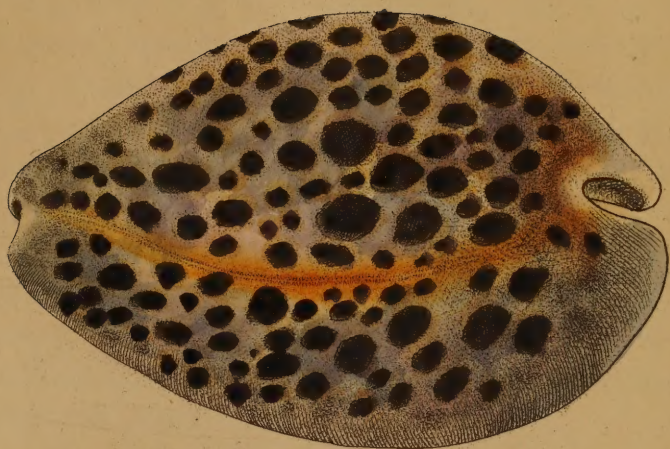
Lin. Syst. Nat. p. 1176.

CYPRÆA TIGRIS.

Lin. Syst. Nat. Gmel. p. 3408.

Licet conchæ pretium augeat raritas, hac tamen ægre reperies pulchriorem quæ fere abundat in museorum scriniis. Variat color, qui plus minus vividus,

duſ, et incertus admodum eſt macularum numerus ; ad ſpeciei vero diſtinctionem notæ ſunt ſatis characteriſticæ. Nomen *Cypræa* huic generi datum eſt, quod antiquitus vocatum ſit *concha Veneris*, quem titulum tranſtulerunt hodierni phyſici ad aliam penitus diverſam, bivalvem nempe, quæ *Venus Dione* Linnæi, quamque in hoc opere jam deſcripſimus. Concham de qua jam tractamus, inſigniverunt antiqui ſcriptores nomine *conchæ Veneris*, quod graviter indignata Venus inſtructam inimiciſſime a Periandro navem contra Cnidi incolas, his ipsis conchis mandaffe fertur ut adhærentes navi morarentur curſum. Notandum porro eſt epidermide carere, ut plurimum, teſtas quas continet hoc genus, et ab ipſa natura eximium nitorem ducere, qui aliis plurimis non niſi labore artificis comparatur.



THE
LEOPARD COWRY.



GENERIC CHARACTER.

Animal resembling a Limax.

Shell univalve, involute, obtuse, ovate.

Aperture linear, longitudinal, toothed on both
sides.

SPECIFIC CHARACTER, &c.

FERRUGINOUS CYPRÆA, spotted with deep-
brown, with a yellowish dorsal line; white
beneath.

THE COMMON SPOTTED COWRY.

THE TIGER OR LEOPARD COWRY.

Common as is this shell in every collection, and for that very reason considered as of little value, there scarcely exists a more beautiful species. It varies much in intensity of colour, as well as in the number of the spots with which it is so elegantly adorned, but the characteristic marks of the species are always readily ascertained. The name *Cypræa* is
given

given to this genus in compliance with its ancient title of *Concha Veneris* or *Venus's Shell*; which in modern conchyliology belongs to a bivalve shell which has already made its appearance in the present work, viz. the *Venus Dione* of Linnæus. The name *Concha Veneris* applied to the present shell by the ancient writers originated from its supposed efficacy in expediting the commands of the goddess Venus, who, displeased at a voyage undertaken by order of the tyrant Periander against the natives of Gnidos, is said to have made use of this shell to stop the progress of the vessel. I should observe that the *Cyprææ* in general are unfurnished with any epidermis or exterior cuticle, and are found naturally adorned with that beautiful polish which is given to many other shells by artificial means.

MADREPORA RAMEA.



CHARACTER GENERICUS.

Animal Medusa.

Corallium cavitatibus lamelloso-stellatis.

Lin. Syst. Nat. p. 1272.

CHARACTER SPECIFICUS, &c.

MADREPORA subpinnata ferruginea, ramis cylindraceis truncatis, apice stellatis.

MADREPORA fruticulosa ferruginea, ramulis obliquis subpinnatis adscendentibus cylindraceis stella terminatis.

Soland. et Ellis. Zooph. p. 155. t. 38.

MADREPORA caulescens pinnata undulato-friata, stellis terminalibus.

Lin. Syst. Nat. p. 1280.

MADREPORA maxima ramosa.

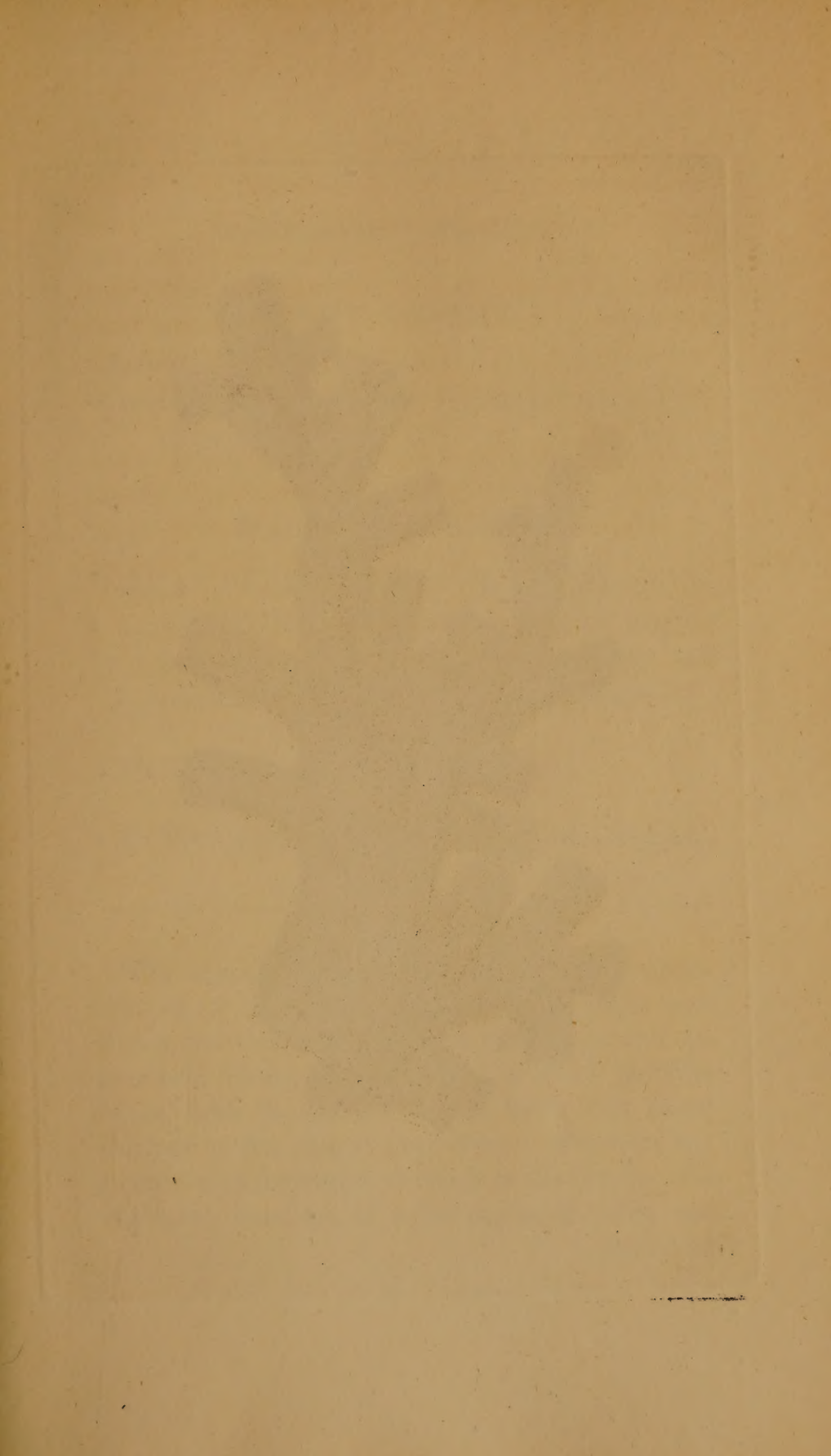
Tourn. inst. t. 340.

CORALLIUM maximum truncatum.

Best. mus. t. 26.

Coralliorum omnium longe numerosissimum est genus *Madrepora*, speciesque inter se invicem longissime distant. Nonnullis forma est sphaerica seu

fere sphærica, superficie signis rotundis et quasi stellatis dense gemmata. Undulantur aliæ fulcis gyrañtib9 et labyrinthi more flexuosis. Quibusdam facies est plana et expansa, radiata tamen stellis, vel sinuose striata ad instar Madreporarum globosarum. Sunt denique nonnullæ rameæ, situ vero numeroque ramorum longe diversæ. E maximis hujusmodi est quæ in tabula depingitur, alta sæpe duos pedes; frequentius tamen minor. Color generalis est ferrugineo-pallidus, seu cinnameus. Singulus ramulus quasi truncatus seu diffractus videtur, et in uniuscujusque apice cavitas est stellata, quæ, recente adhuc corallio, sedes erat incolæ animalis, Medusam quodammodo referentis. Externa Madreporæ rameæ superficies paululum est scabra, totaque striis longitudinalibus fulcatur. In India Orientali nascitur.





CINNAMON MADREPORE.



GENERIC CHARACTER.

Animal allied to a Medusa.

Coral marked with lamellar star-shaped impressions or cavities.

SPECIFIC CHARACTER, &c.

GREAT FERRUGINOUS BRANCHED MADREPORE, with striated cylindric subpinated branches, terminating abruptly and marked at the top by a star-shaped cavity.

CINNAMON MADREPORE.

CINNAMON OR MAY-BLOSSOM CORAL.

The genus Madrepora is by far the most numerous of all the Corals, and the species differ most widely from each other in their habit or general appearance. Some are of globular, or nearly globular forms, with the surface thickly beset with round radiated or star-shaped impressions: others are undulated with serpentine channels in the manner of a labyrinth: some are of a flat expanded form, and decorated

decorated either with starry impressions, or with undulations in the manner of the globular ones: others again are of a ramified figure, and vary greatly in the disposition and form of the branches of which they consist. Amongst the branched Madrepores the species here figured is one of the largest, and is often seen of the height of nearly two feet. The generality of specimens are however much less. Its general colour is a very pale ferruginous, or cinnamon-colour. Each of the branches terminates in an abrupt manner, as if broken, or cut off, and is marked at the top with a star-shaped impression, in each of which, in the recent coral, resided an animal somewhat allied to a Medusa. The external surface of this coral is roughish, and marked throughout its whole length with fine longitudinal striæ or furrows. It is a native of the East Indies.

CHARADRIUS HIMANTOPUS.



CHARACTER GENERICUS.

Rostrum teretiusculum, obtusum.

Nares lineares.

Pedes cursorii, tridactyli.

Lin. Syst. Nat. p. 253.

CHARACTER SPECIFICUS, &c.

CHARADRIUS ALBUS, alis dorsoque nigris,
rostro acuto capite longiore, pedibus rubris
longissimis.

CHARADRIUS ALBUS, dorso nigro, rostro
nigro capite longiore, pedibus rubris lon-
gissimis.

*Rostrum nigrum apice crassius. Oculi rubri
pupilla alba. Corpus album, sed nigri-
cans dorso, occipite, tectricibus alarum.*

Lin. Syst. Nat. p. 255.

CHARADRIUS ALBUS, dorso nigro, rostro
nigro capite longiore, pedibus longissimis.

*Rostrum nigrum apice crassius: corpus album,
sed nigricans dorso, occipite, tectricibus
alarum. Sexus alter albus, alis dorsoque
usque ad uropygium nigris.*

Lath. ind. orn. p. 741.

CHARADRIUS ALBUS, dorso nigro, rostro nigro capite longiore, pedibus rubris longissimis.

Rostrum gracile, apice crassius; irides rubræ; frons, orbitæ, uropygium, cauda et corpus subtus alba; vertex, dorsum et alæ nitenti-nigræ; cervix maculis obscuris varia.

Lin. Syst. Nat. Gmel. p. 690.

HIMANTOPUS.

Gesn. av. 547.

Aldr. orn. 9. p. 193. t. 1. f. 1.

Raii. syn. p. 106. n. 9. p. 193. t. 1. f. 1.

Will. orn. p. 219. t. 54.

Sibb. Scot. 3. p. 18. t. 11. 13.

Charadrium Himantopum, in Anglia rarissimum, in locis tamen aquosis interdum conspectum, a reliquo genere facillime distinguit mira crurum longitudo; quæ si Phoenicopterus excipiamus, major fortasse illi pro corpore, quam alii ulli avi quam adhuc novimus. Lubentissime de illo jam differimus, ut lucidius appareat quod in charactere specifico vel neglexisse vel non satis intellexisse videntur plurimi auctores; et corrigatur non levis error in Systemate Naturæ Linnæano. Huic autem emendando plene sufficiunt observationes quas nobiscum amicissime commu-

communicavit vir reverendus Hugo Davies, de *Aber*
in *Cambria boreali* quem physicæ generatim peritum,
avium vero nostratium apprime callentem, non se-
mel merito collaudavit Pennantus in *Zoologia Bri-*
tannica. Literas a solerti hoc viro receptas lectori-
bus proponimus.

GEORGIO SHAW, M. D.

Apud Museum Britannicum, Londini.

DOMINE,

Mirum fortasse videatur me avem tibi depictam
misisse, quam descripserunt et delinearunt plurimi
auctores; Charadrium nempe Himantopum Linnæi:
qui tamen in eleganti tuo et erudito *Naturæ Vivario*
(*Naturalist's Miscellany*) merito sibi locum vindicat;
non modo quod pedes cruraque pulcherrime rubra
nigro rostro, alæ tergumque fulgido-nigrantia niveo
pectori belle opponantur, miraue omnino sit par-
tium inæqualitas; set ut detur tibi occasio errorem
amovendi qui apud physicos de forma rostri lo-
quentes diu invaluit: error enim certe est, nisi mira
sit variorum speciminum discrepantia. In *Systemate*
Naturæ Linnæano dicitur *rostrum apice crassius*; cui
definitioni assentitur Gmelinius qui idem edidit opus,
et nihil mutat, licet in aliis descriptionem auctiorem
et meliorem reddiderit. Nec aliter depingitur ros-
trum in plerisque avis exemplaribus; seu fides habita
sit auctorum descriptionibus, seu ipsa specimina
manca fuerint, difficile est dicere. Sæpe etiam re-
præsentatur rostrum a basi ad apicem incurvum,

quod in nostro specimine omnino rectum, longum duas uncias cum sex uncia decimis, et a basi gradatim ad tenue extremum decrescens, mandibula superiori paulo longiori quam inferior, cui superincurvatur. E recentioribus in mentem mihi venit Scopoli* solus, qui hoc recte notavit, et aptis verbis accurate definivit. “*Rostrum rectum, mandibula superiore longiore, apice deflexa.*” Laxior licet sit Willoughbeii descriptio, quam forsan ab Aldrovando mutuatus est, ad quem lectores relegat, (nunquam enim ipse avem viderat) fere eadem tamen est verborum significatio. “*Rostrum gracile, insectis lancinandis aptum.*” At nullibi hujus avis delineationem vidimus quæ magis conveniat cum Willoughbeii et Scopoli descriptionibus, nec non cum hoc nostro specimine, quam illa, quæ rudis fane, sed non infida reperitur in Sibbaldi et Gesneri† operibus.

Liceat vero mihi conjicere ortum fortasse esse errorem Linnæanum a mero calami lapsu: habuisse nimirum illum in animo duo hæc verba, *crassus* et *acutus*, alterumque loco alterius inopinato substituisse: vix enim putem acutum illum Naturæ indagatorem specificam differentiam designare voluisse termino qui in charactere generico includitur; præsertim cum “*rostrum apice acutius,*” *obtusum* contrarium, quod est characteris generici, speciei distinctionem adeo insigniter denotet, ut primo suspicatus sim ipsum genus diversum.

* Annus I. Historico-naturalis, 1769.

† Icones Animalium, 1560.

Oculi pupillam dicit Linnæus albam, quæ in hoc nostro specimine nigra erat, iride rubra. In animo habui ipsum rostrum tibi mittere, ut de eo certior fieres; sed illud servare necesse erat, ut integra et perfecta esset figura, quam effinxit prope nos degens ingeniosa femina, quæ, pennis apte juxta ipsam Naturam dispositis, vitam avi quasi secundam donavit, prima certe diuturniorem, tantum non pulchritudine parem.

Masculini erat generis Charadrius Himantopus de quo scripsimus, in Mona scloppetio confectus anno millesimo septingentesimo nonagesimo tertio.

Sum,

Domine, &c. &c. &c.

HUGO DAVIES.



THE
LONG-LEGGED PLOVER.



GENERIC CHARACTER.

Bill straight, somewhat cylindric, obtuse, and (in general) not longer than the head.

Feet cursorial: with three toes all placed forward.

Nostrils linear.

SPECIFIC CHARACTER, &c.

WHITE PLOVER with black back and wings,
slender sharp-pointed black bill and extremely
long red legs.

THE LONG-LEGGED PLOVER.

Pennant. Brit. Zool. No. 209.

——— edit. fol. p. 128. t. e. *add. pl.*

LONG-LEGS.

Ray. syn. p. 190. 7.

HIMANTOPUS.

Will. orn. p. 297. pl. 54.

LONG-LEGGED PLOVER.

Lath. Syn. 2. p. 195.

L'ECHASSE.

Buf. ois. 8. p. 114. pl. 8.

Pl. enl. 878.

LONG.

LONG-LEGGED PLOVER.

*Pennant. Zool. Caledon. pref. to Lightf.
Flor. Scot. p. 35. pl. 4.*

White Hist. Selb. p. 259. pl. 4.

The Charadrius Himantopus, so remarkable for the extraordinary length of its legs, which, except those of the Flamingo, are perhaps longer in proportion than in any other bird yet discovered, is extremely rare in England; it is however sometimes observed in watery places, and is easily recognised from any other of the plover kind by the particular character above mentioned. I now introduce it into the present work in order that a particular of some importance in its specific character, and which hitherto appears to have been either mistaken or overlooked by most authors, may be clearly understood, and an important error in the Systema Naturæ of Linnæus be placed in its proper light. This I am enabled to do in the completest manner by the observations of the Rev. Mr. Hugh Davies, of Aber in North Wales, a gentleman whose merits as an observant naturalist, and particularly with respect to the birds of our own island, are so often and so justly commemorated by Mr. Pennant in his British Zoology.

Mr. Davis's letter to me on the present occasion is as follows :

To

To Dr. S HAW,

British Museum, London,

DEAR SIR,

It may perhaps seem strange that I should send for your perusal a drawing of a subject described and figured by so many different authors; I mean the *Charadrius Himantopus* of Linnæus, the Long-Legged Plover of Mr. Pennant and Mr. Latham. This bird, on account of its beautifully red feet and legs contrasted with its black bill; the glossy blackness of its wings and back, with the snowy whiteness of its breast; but particularly the singular proportion of its parts, is exceedingly curious, and seems to claim a place in your highly elegant and learned work, the *Naturalist's Miscellany*; but that is not the only reason of this address; you will have an opportunity of obviating what seems to me (after an attentive examination of one of this species) a mistake, that hath prevailed among authors respecting the form of the bill of this bird; unless it varies unaccountably in different individuals.

Linnæus in his *Systema Naturæ* gives it *rostrum apice crassius*; Gmelin, in his edition of that work, repeats the same words, though he has improved the description in other particulars. Most of the figures I have seen represent it in the same manner; whether taken from description, or mutilated specimens, I shall not pretend to determine. In many figures the bill is likewise incurved from the base to the end, which is by no means the case in the subject from
which

which the present drawing is made: here it is perfectly straight, two inches and six tenths of an inch long, and tapers gradually from the base to a fine point, the upper mandible being a little longer than the lower, and bent over it. Scopoli * is the only modern author I know who has observed this, and thus accurately expressed it, *Rostrum rectum, mandibula superiore longiore apice deflexa*; Willoughby's description, though not so particular, implies nearly the same, *Rostrum gracile insectis lancinandis aptum*, probably taken from Aldrovandus, whom he refers to, not having himself seen the bird. The rude, but not ill proportioned figures of Sibbald and Gesner † correspond, in this particular, with the descriptions of Scopoli and Willoughby, as well as with my specimen, better than any others I have seen.

May I presume to offer a conjecture how a mistake in description might have been first produced by a slip of the pen of the great Naturalist? He probably had the two words *crassus* and *acutus*, in idea, and accidentally inserted the one instead of the other; for I cannot conceive that the accurate Linnæus could have intended that as a specific difference, which was part of the Generic character; whereas the deviation of *rostrum apice acutius*, from the Generic character, *obtusum*, affords a most striking specific

* Annus I. Historico-naturalis, 1769.

† Icones Animalium, 1560.

distinction: I at first sight, indeed, thought it so remarkable, as to point out a distinct genus.

Linnæus says the pupil is white; in my subject it was black, the iris red.

I wished to have sent the part in question of the bird for your satisfaction, but it was necessary to preserve it, to complete a figure made by an ingenious Lady in this neighbourhood, who, by a judicious and accurate arrangement of the feathers in their natural order, has conferred on the subject a second existence, more permanent, and scarce less beautiful than its first.

This was a male bird, and shot in Anglesea in the year 1793.

I am, &c. &c.

HUGH DAVIES.

MEDUSA CAMPANELLA.



CHARACTER GENERICUS.

Corpus gelatinosum, orbiculatum, depresso.

Os subtus, centrale.

Lin. Syst. Nat. p. 1096.

CHARACTER SPECIFICUS, &c.

MEDUSA hyalina campanulata, subtus tentaculis
quatuor corpus cingentibus, cirris marginali-
bus filiformibus sedecim.

MEDUSA CYMBALOIDES.

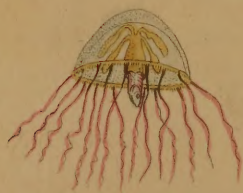
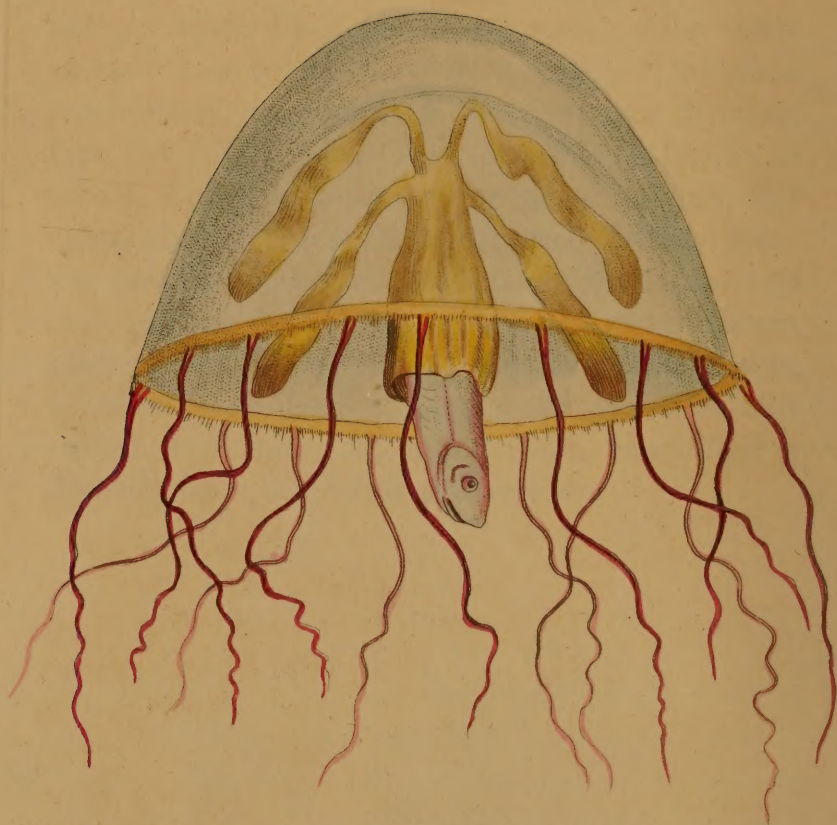
Slabb. Nat. Verl. t. 12. f. 1. 2. 3.

MEDUSA HEMISPHERICA?

Mull. Zool. Dan. p. 25. t. 7. f. 1. 2. 3.?

Toto Medusæ genere vix ulla protulit mare ani-
malia substantiæ tenerioris et ad repellendas injurias
minus aptæ: constat quippe e massa gelata, in di-
versis speciebus plus minus densa varieque formata,
e qua subtus brachia aliquot seu tentacula excre-
scunt. Ob summam hanc mollitiem vix aliquo
modo asservari possunt Medusæ sine membrorum et
figuræ detrimento: unde fit ut in distinguendis spe-
ciebus

ciebus sæpissime erretur; nec ad veram illarum notitiam possit perveniri nisi ope iconum ab ipsissimis animalibus recentibus et in aqua natali accurate effictarum. Medusarum myriades super litora arctica longe lateque natantium conspiciuntur; et ex his magna ex parte constare creditur cibus balænarum, pisciumque cetaceorum. Plurimæ etiam species circa litora nostra videndæ sunt. Plerisque inducitur non mediocris colorum elegantia. Aliæ viride pallent: aliæ rubro, cæruleo, reliquisque coloribus pulcherrime tinguntur. Sunt etiam quæ hyalinæ sunt, seu velut vitreæ. Inter tales militat species in tabula, quæ non solum magnitudine naturali, sed etiam vitro optico aucta depingitur. In mari Arctico præcipue nascitur. Medusarum species majores cuti admotæ levem inflammationem et rubedinem ciere dicuntur, et inde nomine urticarum marinarum, a quibusdam distinctæ sunt; quod tamen et aliis multis animalibus, Actiniis scilicet, reliquisque a Medusis longe differentibus datum est.



BELL MEDUSA.



GENERIC CHARACTER.

Body gelatinous, orbicular, (commonly) depressed.
Mouth central, beneath.

SPECIFIC CHARACTER.

HYALINE BELL-SHAPED MEDUSA, with
four tentacula annexed to the body, and about
sixteen marginal filiform cirri.

The genus Medusa is of all other marine animals the most tender, and seemingly the most defenceless; consisting of a gelatinous mass of different figure and density in the different species, and furnished with a certain number of arms or tentacular processes proceeding from its under surface. In consequence of this extreme delicacy, the species of Medusæ are scarce capable of being preserved in spirits, or any other way, without suffering such a derangement in their figure as to prevent them from being accurately ascertained. Hence this genus of all others seems the least accurately known; since nothing but figures, executed from the living animals in their native waters, can convey a just idea of their real and natural appearance. They are animals which are by no means

means uncommon: several species swarm by myriads on the surface of the northern seas, and are supposed to make a principal part of the food of whales and other cetaceous fish. Several species are also found near our own coasts. The Medusæ in general are animals of considerable beauty of colour; some being of an elegant pale green; others tinged with blue, red, and other colours; and some are nearly colourless, or of a glass-like appearance. In this latter tribe ranks the species represented in the present plate, which is figured both in its natural size and magnified: it is principally found in the northern ocean.

The larger Medusæ, when applied to the skin, are said to excite a slight degree of inflammation and redness; from which circumstance they have obtained the appellation of *urticæ marinæ*, or sea-nettles; a title which has also been applied to some very different marine animals, as the Actiniæ and some others.

PAPILIO ANTENOR.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ (sedentis) erectæ fursumque conniventes, (volatu diurno.)

Lin. Syst. Nat. p. 774.

CHARACTER SPECIFICUS, &c.

PAPILIO alis concoloribus nigris albido maculatis; posterioribus lunulis marginalibus rubris.

PAPILIO ANTENOR.

Drury inf. 2. t. 3. f. 1.

Eq. Troes.

Fabr. sp. inf. 2. p. 3. n. 8.

Lin. Syst. Nat. Gmel. p. 2227.

Paucis papilionibus exoticis augustior est vultus quam Antenori. Color imus fusco-nigricat, maculis notisque plurimis, magnis, gilvis ornatus. Alarum inferiorum pars media atomis innumeris seu

I squamis

fquamis nitidis virescit. Ima superficies alarum notas habet prope carneas, inferiorum præcipue; tingunturque in medio singulæ maculæ in marginibus fitæ nubecula læte miniata.



ANTENOR,



GENERIC CHARACTER.

Antennæ thickening towards the upper part, and generally terminating in a clavated tip.

Wings (when fitting) erect, and meeting upwards.
(*Flight* diurnal.)

SPECIFIC CHARACTER, &c.

BLACK BUTTERFLY SPOTTED WITH
WHITISH: with a marginal row of lunulated red spots on the lower wings: both surfaces nearly similar.

Few of the exotic Butterflies have an air of greater magnificence than the present. Its general colour is a rich blackish brown, ornamented by numerous large clay-colour'd spots and patches. The disk or middle part of the lower wings has a greenish cast; owing to innumerable shining scales or specks of that colour. On the under surface the spots incline to flesh-colour, particularly those of the lower wings, while the marginal ones are very strongly tinged with a cloud of vermilion-red in the middle of each.

RAMPHASTOS ARACARI.



CHARACTER GENERICUS.

Rostrum maximum, inane, convexum, extrorsum
ferratum: mandibula utraque apice incurva.

Nares pone rostri basin.

Lingua pennacea.

Pedes scanforii plerisque.

Lin. Syst. Nat. p. 150.

CHARACTER SPECIFICUS, &c.

RAMPHASTOS NIGRO-VIRIDIS, mandibula
superiore albida carina nigra, abdomine flavo
fascia rubra.

RAMPHASTOS ARACARI.

Lin. Syst. Nat. p. 151.

ARACARI.

Raii. syn. p. 44.

Will. orn. p. 96. t. 22.

In numero est specierum majorum Ramphastos Aracari, longus scilicet quasi sedecim seu septendecim pollices a rostri apice ad extremum caudæ. Amat præcipue, ut et alii congeneres, regiones calidiores Americæ Australis. Habent nonnulla specimina maculam parvulam ferrugineam, utrinque pone oculos sitam.



London, Published Jan. 1795 by F. P. Nodder & Co. N. 15, Brewer Street.

THE
RED-BANDED TOUCAN.



GENERIC CHARACTER.

Bill excessively large, convex, bending towards the tip, light, hollow, ferrated.

Tongue long, narrow, feathered on the edges.

Feet formed for climbing.

SPECIFIC CHARACTER, &c.

BLACKISH-GREEN TOUCAN, with the upper mandible white with a black carina; the abdomen yellow with a red band.

LE TOUCAN verd du Bresil.

Briss. orn. 4. p. 426. n. 9. pl. 33. f. 2.

LE GRIGRI.

Buff. ois. 7. p. 126. *Pl. enl.* 166.

ARACARI.

Will. orn. p. 140. pl. 22.

The Ramphastos Aracari or red-banded Toucan ranks amongst the larger species of this genus, and measures about sixteen or seventeen inches from the tip of the bill to the extremity of the tail. Like the

CIRCULAR VORTICELLA.



GENERIC CHARACTER.

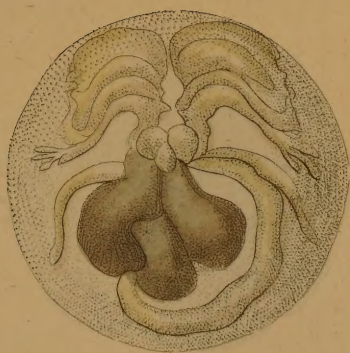
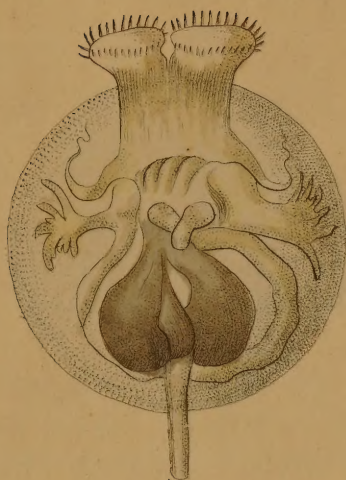
Body contractile: in some species naked; in others included in a shell.

Cilia or rotatory fibrils furrounding the head or upper part.

SPECIFIC CHARACTER.

VORTICELLA with circular pellucid shell and double rotatory organ.

This most curious animalcule, which the plate represents very highly magnified, may be considered as one of the rarer species of Vorticella. It is found in stagnant waters in the month of may. The upper figure shews its appearance when the rotatory organs and tail are extended; the lower as it appears when these parts are contracted within the circumference of the circular transparent shell. The strong and regular pulsation of the triple vesicle in the middle, or heart, (if it really be such,) is singularly conspicuous in this animalcule.



RANA AUSTRALIACA.



CHARACTER GENERICUS.

Corpus tetrapodum, ecaudatum, nudum.

Lin. Syst. Nat. p. 354.

CHARACTER SPECIFICUS.

RANA FUSCA, subtus cærulefcens, lateribus gil-
vo punctatis, digitis anterioribus spinosis.

Digna sane depingi est hæc species, non modo quod deformitatem excuset quodammodo raritas, sed quod in remoto orbe generata, in Australia scilicet, unde museis Europeis mirum accessit incrementum, jam primo describatur.

THE AUSTRALIAN FROG.



GENERIC CHARACTER.

Body four-footed, naked, without tail.

SPECIFIC CHARACTER.

BROWN FROG, blueish beneath; with the sides speckled with ochre-colour, and the toes of the fore-feet spiny.

This animal certainly cannot be numbered amongst the most beautiful of its genus: it is a species, however, which has never before been described, and is more peculiarly interesting from the circumstance of its being a native of the distant region of New Holland, which has added so many zoological treasures to the cabinets of natural history. Its rarity must therefore apologize for its deformity.



London, Published Jan. 7th 1793 by R. D. Nodder & Co. No. 15. Bowyer Street.

PARUS MAJOR.



CHARACTER GENERICUS.

Rostrum integerrimum, basi fetis tectum.

Lingua truncata, fetis terminata.

Lin. Syst. Nat. p. 340.

CHARACTER SPECIFICUS, &c.

PARUS OLIVACEUS, subtus flavescens fascia longitudinali nigra, capite nigro, temporibus albis.

PARUS CAPITATE NIGRO, temporibus albis, nucha lutea.

Lin. Syst. Nat. p. 341.

PARUS MAJOR.

Gesn. av. 640.

Will. orn. 174.

Parorum quos generat Britannia maximus est qui in tabula depingitur, aviculis multis nostratibus longe splendidior. Hortos frequentat et pomaria, et licet insectis præcipue vescatur, more tamen Paricærulei, tenellis arborum fructiferarum gemmis non leve damnum solet inferre.



THE GREAT TITMOUSE.



GENERIC CHARACTER.

Bill strait, a little compressed, strong, hard, and sharp-pointed.

Nostrils round, and covered with reflex bristles.

Tongue as if cut off at the end, and terminated by three or four bristles.

Toes divided to their origin; back toe large and strong.

SPECIFIC CHARACTER.

OLIVACEOUS TITMOUSE, yellowish beneath with a longitudinal black band; the head black; the temples white.

GREAT TITMOUSE, or OX-EYE.

Will. orn. p. 240. pl. 43.

Br. Zool. 1. No. 162.

LA GROSSE MESANGE, ou la CHARBONNIERE.

Briss. orn. 3. p. 539. No. 1.

Buff. ois. 5. p. 392. pl. 17.

Pl. enl. 3. f. 1.

The *Parus Major* is the largest of the British *Pari*, and from the liveliness of its colors, makes a more conspicuous

conspicuous appearance than many other of the English small-birds. It is extremely frequent in orchards and gardens, and, like the blue titmouse or *Parus cæruleus*, is considered as injurious to fruit-trees, by destroying the young buds. It feeds however principally on insects.

LOPHIUS MONOPTERYGIUS.



Caput (corpusque plerisque) depressum.

Dentes plurimi, acuti.

Oculi verticales.

Corpus squamis nudum, informe.

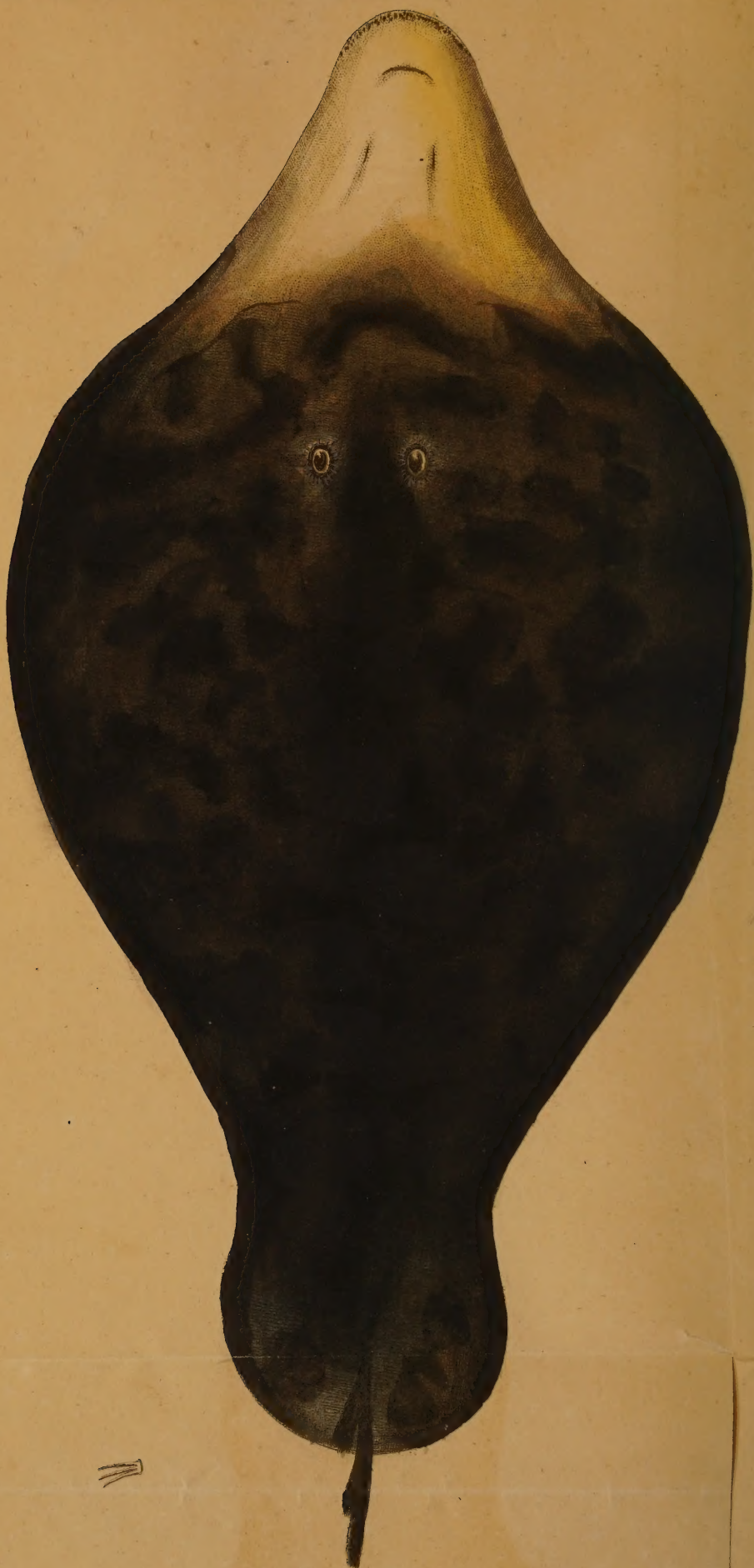
CHARACTER SPECIFICUS.

LOPHIUS? DEPRESSUS NIGRICANS, subtus
capiteque albidus, pinna supracaudali sube-
recta ramosa.

Inter Lophios reponendum censuimus novum hoc animal et adhuc incognitum, non quod iis plene respondeat character genericus, sed quod idem fere sit oris habitus, et forma generalis. Depingitur in tabula vera et naturalis magnitudo, situ ter variato, ut de corporis partibus melius possit judicari.

In maribus Australiacis innascitur Lophius monopterygius: in quem quo arctius inquirimus, eo magis pergimus dubitare, sitne foetus seu pullus trichechi alicujus, an piscis cetacei; an ipsum genus sit novum omnino, et ab aliis omnibus diversum.

1 Dens magnitudine auctus.



London Published Febry 1795 by F. D. Nodder by N. 15 Brewer Street.



Not drawn by F.P.N.

SINGLE-FINNED LOPHIUS.



GENERIC CHARACTER.

Head (and body in most species) depressed.

Eyes vertical.

Teeth numerous, minute, sharp.

Body destitute of scales.

Shape uncouth.

SPECIFIC CHARACTER.

DEPRESSED BLACKISH LOPHIUS? with
the head and body beneath whitish; fin
above the tail suberect and ramose.

It is rather from its general habit than from an exact agreement in point of generic characters, that I have considered this curious animal as a species of Lophius. It is figured of the size of nature, and in order to convey as distinct an idea as possible of an animal not only in the highest degree singular, but which is also entirely new, it is represented in three different views. It is a native of the Australian seas.

The more closely this object is considered, the more dubious it appears. Can it be the young or the foetus of any of the Trichechi? or any of the cetaceous tribe? or does it rather form a new genus distinct from every other?

1 A magnified tooth.

FALCO FURCATUS.



CHARACTER GENERICUS.

Rostrum aduncum, basi cera instructum.

Caput pennis arcte tectum.

Lingua bifida.

Lin. Syst. Nat. p. 124.

CHARACTER SPECIFICUS, &c.

FALCO ALBUS, alis dorso caudaque purpureo-nigricantibus, rostro nigro, pedibus flavis.

FALCO FURCATUS.

Lin. Syst. Nat. p. 129.

FALCO PERUVIANUS cauda furcata.

Klein. av. p. 51. No. 14.

ACCIPITER cauda furcata.

Catesb. Carol. 1. p. 4. t. 4.

Non vestivit natura falconum genus venusta plumarum varietate, sed corpus dedit vegetum et robustum, ignitam aciem oculorum, bellicam vultus audaciam. At aliquibus nec deesse vel colorum elegantiam satis testatur species de qua jam tractamus, pulcherrime lactea, dorso alis caudaque pro variata luce magis minusve purpureo-nigricantibus, non

M

fine

sine mutabili quodam viroris nitore. Rostrum nigricat; pedes flavent. Generatur Falco furcatus in America Boreali: in utraque Carolina, Georgia, et Florida sæpissime, necnon in partibus magis ad septentrionem versis. Magnitudine milvo Europæo paulo inferior est.



SWALLOW-TAILED FALCON.



GENERIC CHARACTER.

Bill hooked; with a cere or naked skin at the base.

Head thickly beset with feathers.

Tongue generally bifid.

SPECIFIC CHARACTER, &c.

WHITE FALCON, with the back, wings, and tail purplish black; the bill black, the legs yellow.

The SWALLOW-TAILED FALCON.

Lath. syn. 1. p. 60.

Le MILAN de la CAROLINE.

Briss. av. 1. p. 418. No. 36.

Buff. ois. p. 221.

SWALLOW-TAILED HAWK.

Catesb. Carol. 1. p. 4. pl. 4.

The birds of this genus are in general much more remarkable for their bold and spirited aspect, and their superior degree of strength and courage than for elegance of plumage. The present species how-

ever is highly distinguished by its beauty of color. It is milk-white, with the back, wings, and tail of a rich purplish black, with a gloss of changeable green, varying according to the direction of the light. The bill is black; the legs and feet yellow. This bird is a native of North America, and is not uncommon in both the Carolinas, as well as in Georgia and Florida, and even in the more northern parts of the American Continent. It is somewhat smaller than the common Kite.

APHRODITA ACULEATA.



CHARACTER GENERICUS.

Corpus repens, ovale; pediformibus utrinque fasciculis pluribus.

Os terminale, cylindricum, retractile.

Tentacula oris duo, fetacea.

Lin. Syst. Nat. p. 1084.

CHARACTER SPECIFICUS, &c.

APHRODITA OVALIS hirsuta aculeata.

Lin. Syst. Nat. p. 1084.

APHRODITA NITENS.

Lin. Mus. Ad. Frid. 1. p. 93.

PHYSALUS.

Swammerd. bibl. Nat. t. 10. f. 8.

VERMIS AUREUS.

Barthol. act. Hafn. 3. p. 88. t. 88.

Distincta interdum est Aphrodita aculeata nomine erucæ marinæ, ob summam similitudinem quæ illi esse creditur cum erucis nonnullis majoribus. Corpus est ovatum, extremitatibus paululum acutis. Dorsum valde convexum, venter fere planus. Dividitur corpus in segmenta circiter triginta, quibus utrinque

utrinque adstant totidem pedes breves crassique seu papillæ, quarum utraque fasciculo setarum nigrarum terminatur. Color supra fuscus, subtus obscure carneus. Corpus vestitur setis plurimis seu potius spinulis acutis, duplicem quasi fasciam ducentibus, et assurgentibus supra pilum illum mollem et delicatulum qui in lateribus aspicitur. Distinguitur hic pilus quasi sericus lateralis colorum nitore pro lucis ratione variantium, ut in pavonum pennis. Dorsum medium plerumque aculeis caret, obtegiturque villo denso qui brevior longe quam in lateribus. In ple-
risque Europæ Septentrionalis litoribus reperitur Aphrodita aculeata, raro quinque seu sex uncii lon-
gior, plerumque multo minor.



ACULEATED APHRODITA.



GENERIC CHARACTER.

Body repent, oval; with numerous bristly fasciculated feet on each side.

Mouth terminal, cylindric, retractile.

Tentacula at the mouth, two, fetaceous.

SPECIFIC CHARACTER, &c.

OVAL APHRODITA, brown above, flesh-coloured beneath, with long silky changeable hair on each side the body.

ACULEATED APHRODITA.

Penn. Brit. Zool. 4. p. 37. t. 23. f. 25.

SEA MOUSE.

Dale's Harwich, 394.

From a general resemblance which this creature bears to some of the larger caterpillars, it has been sometimes called by the name of *eruca marina*. Its outline is oval, with somewhat sharpened extremities. The back is extremely convex, and the belly nearly flat. The body is divided into about thirty segments, on each side of which stand so many short thick feet or papillæ, each terminated by

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PYRAMIDAL CLIO.



GENERIC CHARACTER.

Body nasant, oblong, with two opposite membranaceous wing-like processes.

SPECIFIC CHARACTER, &c.

PALE-BLUE CLIO with green eyes, the sheath of the body compressed and triangular; the mouth obliquely truncated.

PYRAMIDAL CLIO.

The Clio pyramidata principally differs from the rest of its congeners in having the body included in a sort of compressed triangular sheath. In color it varies, but is generally more or less blue, with the body brownish, and the eyes bright green. It is a native of the American ocean, and is represented in its natural size.

MOTACILLA ALBA.



CHARACTER GENERICUS.

Rostrum subulatum, rectum: mandibulis subæqualibus.

Nares obovatæ.

Lingua lacero-emarginata.

Lin. Syst. Nat. p. 3 8.

CHARACTER SPECIFICUS, &c.

MOTACILLA albo nigroque varia, rectricibus exterioribus latere exteriori albis.

MOTACILLA pectore nigro, rectricibus duabus lateralibus dimidiato oblique albis.

Lin. Syst. Nat. p. 331.

Lin. Syst. Nat. Gmel. p. 960.

Lath. ind. orn. p. 501.

Amat, ut plurimum, margines aquarum, et insectis præcipue vescitur bella et concinna hæc avicula, pagorum et villarum notissima habitatrix, vernique temporis imprimis prænuncia.



THE
WHITE WAGTAIL.



GENERIC CHARACTER.

Bill subulate.

Nostrils nearly oval.

Tongue jagged or lacerated towards the tip.

SPECIFIC CHARACTER, &c.

BLACK and WHITE WAGTAIL, with the
two exterior tail-feathers white on the outside.

The WHITE WAGTAIL.

Penn. Brit. Zool. 1. p. 305.

The WHITE WATER-WAGTAIL.

Ray. syn. 75.

Will. orn. p. 237.

LA LAVANDIERE.

Buff. ois. 5. p. 251.

This bird, the constant frequenter of villages, and one of the earliest harbingers of spring, is remarkable for the peculiar neatness of its appearance. It is generally seen near the margins of watery places, and feeds almost entirely on insects.

PEDICULUS VULGARIS.



CHARACTER GENERICUS.

Os haustello retractili.

Pedes sex, ambulatorii.

Antennæ longitudine thoracis.

Abdomen depressum, sublobatum.

CHARACTER SPECIFICUS, &c.

PEDICULUS abdomine oblongo, lobato, cinereo.

PEDICULUS humanus.

Lin. Syst. Nat. p. 1016.

Faun. Suec. No. 1939.

PEDICULUS.

Swammerd. bibl. Nat. t. 1. f. 3. 6,

Mouff. inf. p. 259.

Licet fortasse offensiois aliquid in se habeat hoc animalculum, et ob vilitatem foeditatemque ipsi titulo hujus operis fere videatur contradicere; multa tamen sunt ad ejus historiam, conformationem, et subtilem deformitatem spectantia, quæ attentius examinare vel philosopho non sit injucundum. Pulicem quoque, quem non ita pridem descripsimus, apte satis comitari possit pediculus, licet careat certe lepidi istius insecti concinno corpore.

Per omne ævum habitus est pediculus in ærumnis et miseriis humani generis. Ab hoc nempe vexati homines turpiter desidiofi meritas squaloris et sordium pœnas luunt; ab hoc etiam cruciantur interdum principes, et domini terrarum, haud amplius invidiam sed fastidium commoventes. Quod ut omittam confirmare certissimo sacrarum scripturarum testimonio, memorant antiqui auctores viros magni nominis, qui foedissima horum animalculorum cohorte obruti, miserrime occubuerunt. Morbum tamen qui *phthiriasis* dicitur, a mera negligentia primitus oriri magis quam ab ipso corporis habitu putem: abhorret enim a natura pediculi cutim subire, quod vulgo existimatur, nec facile mihi persuadeam resistere posse aliquid hujusmodi hydrargyro probe sublimato, aliisque pollentibus remediis. Immo fas sit mihi omnino dubitare annon unquam extiterit vera et genuina *phthiriasis*, (de morbo loquor primario) licet ab hac ipsa interemptos Pherecyden Sirium, Syllam dictatorem, et alios nonnullos narret Plinius. De Sylla ita cecinit Quintus Serenus.

“ Sylla quoque infelix, tali languore peresus

“ Corruit, et foedo se vidit ab agmine vinci.”

Non subit pediculus, more pulicis, formæ mutationes, sed ab ovo perfectus et integer evadit, a parentibus non nisi exiguitate discrepans. Specimina hæc exigua potiora sunt quæ microscopice examinentur, nam pellucidiora sunt adultis, et in iis clarius cernuntur muscutorum, viscerum, reliquarumque partium situs et dispositio.

Microf-

Microscopii ope præcipue notatu digna sunt quæ sequuntur. Proboscidis peracutæ, in theca plerumque latentis, pars superior aculeis seu spinulis aliquot recurvis instruitur. Oculi læves, magni, nigri. In ventriculo et intestinis, quæ magnam abdominis partem occupant, evidenter admodum conspici possit motus qui *peristalticus* dicitur. Tracheæ ramuli, per corpus belle varieque dispersi, præcipue notabiles sunt juxta latera abdominis. Crura singula chela duplici, astaci chelæ non absimili, nisi quod longe sit acutior, terminantur. Vestitur totum animal cutē rugosa, granata, pellucida.

Huic descriptioni liceat mihi subjicere versus aliquot Quinti Sereni, quibus explicare conatur poeta, quonam consilio turpia hæc animalcula creavit pater omnipotens, creatisque tantam foecunditatem indulserit.

“ Noxia corporibus quædam de corpore nostro

“ Produxit natura, volens abruptere somnos

“ Sensibus, et monitis vigiles inducere curas.”

Nec possum non Linnæi opinionem lectoribus proponere, qui sedulus pediculi defensor, graviter sententiam suam fert, verisimile nempe esse ut a varietate morborum, quibus aliter laborarent, immunes ferventer pueri, quorum capita pediculis infestantur,



THE LOUSE.



GENERIC CHARACTER.

Head furnished with a *retractile tube* for suction.

Antennæ of the length of thorax.

Feet six, formed for walking.

Abdomen depressed and sublobated.

SPECIFIC CHARACTER, &c.

LOUSE with oblong cinereous lobated abdomen.

The COMMON LOUSE.

To introduce an animal of an appearance so inelegant as the present into a work of this nature, might almost seem a violation of the plan announced in its title: there are however circumstances in its history, and particulars in its conformation, which are well worthy the attention of philosophic enquirers; and if it cannot be considered as beautiful, it may at least be numbered amongst the more curious productions of nature: it may also be added, that it has from time immemorial been considered as a kind of companion (though surely of a far less elegant character

rafter than that cleanly animal) to the flea, already described in the present work.

The Louse, in all ages enumerated amongst the pests of mankind, has been sometimes represented as the mere punishment of personal negligence, and sometimes commemorated as one of the most humiliating concomitants of degraded pride; since, exclusive of the memorable and impressive descriptions on this subject in the sacred writings, we meet with various examples of characters of no small degree of eminence who have suffered from the attacks of this odious insect. The disorder, however, commonly termed *phthiriasis*, is probably more owing to want of early attention during the first stages of its appearance, than to any real constitutional cause in the patient; it being entirely contrary to the nature of this insect to get under the cuticle, as commonly supposed; and utterly inconceivable that a complaint merely external should be able to resist mercurial or other preparations outwardly used; and there can be little doubt but that such cases, whenever they occur, would be effectually removed by a proper application of a dilute solution of mercury sublimé. I must even venture to express my doubts whether a real and genuine *phthiriasis*, (considered as a primary disease) has ever appeared. Notwithstanding this, we are told by Pliny that Pherecydes Sirius, Sylla the dictator, and others, have died of this disorder. Quintus Serenus speaks thus of the latter:

“ Sylla

“ Sylla quoque infelix tali languore peresus

“ Corruit, et foedo se vidit ab agmine vinci.”

Great Sylla too the fatal scourge hath known ;
Slain by a host far mightier than his own !

The Louse does not, like the flea, undergo a change of form, but is hatched from the egg complete in all its parts, and differing only from the parent insect in its smaller size. Such diminutive specimens are far preferable for microscopical examination to the full-grown ones, being much more transparent, and shewing in a more elegant manner the disposition of the muscles, viscera, &c.

When examined by the microscope the principal appearances are as follow : viz. the trunk or proboscis, which is generally concealed in its sheath or tube, is of a very sharp form, and is furnished towards its upper part with a few reversed aculei or prickles. The eyes are smooth, large, and black. The stomach and intestines, which possess the greater part of the abdominal cavity, afford an extremely distinct and curious view of the peristaltic motion. The ramifications of the trachea, or respiratory tube, appear dispersed in a most beautiful manner throughout various parts of the animal, and are particularly observable towards their orifices on the sides of the abdomen. The legs are each terminated by a double claw, not greatly unlike that of a lobster, but of a much sharper form. The whole animal is every where covered by a strong and granulated skin.

To

To what I have said respecting this animal I shall beg leave to add the lines of Serenus, as an attempt towards discovering an apparent intention of providence in permitting the frequency of such unpleasing animals.

“ Noxia corporibus quædam de corpore nostro
“ Produxit natura, volens abrumpere somnos
“ Sensibus, et monitis vigiles inducere curas.”

See nature, kindly provident, ordain
Her gentle stimulants to harmless pain ;
Left man, the slave of rest, should waste away
In torpid slumber life's important day!

Nor can I omit the observation of Linnæus on this subject, who, seemingly anxious to become an apologist for the Louse, has gravely observed that it probably preserves children who are troubled with it, from a variety of complaints to which they would otherwise be liable!!!

COLUBER AHÆTULLA.



CHARACTER GENERICUS.

Scuta abdominalia,
Squamæ subcaudales.

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS, &c.

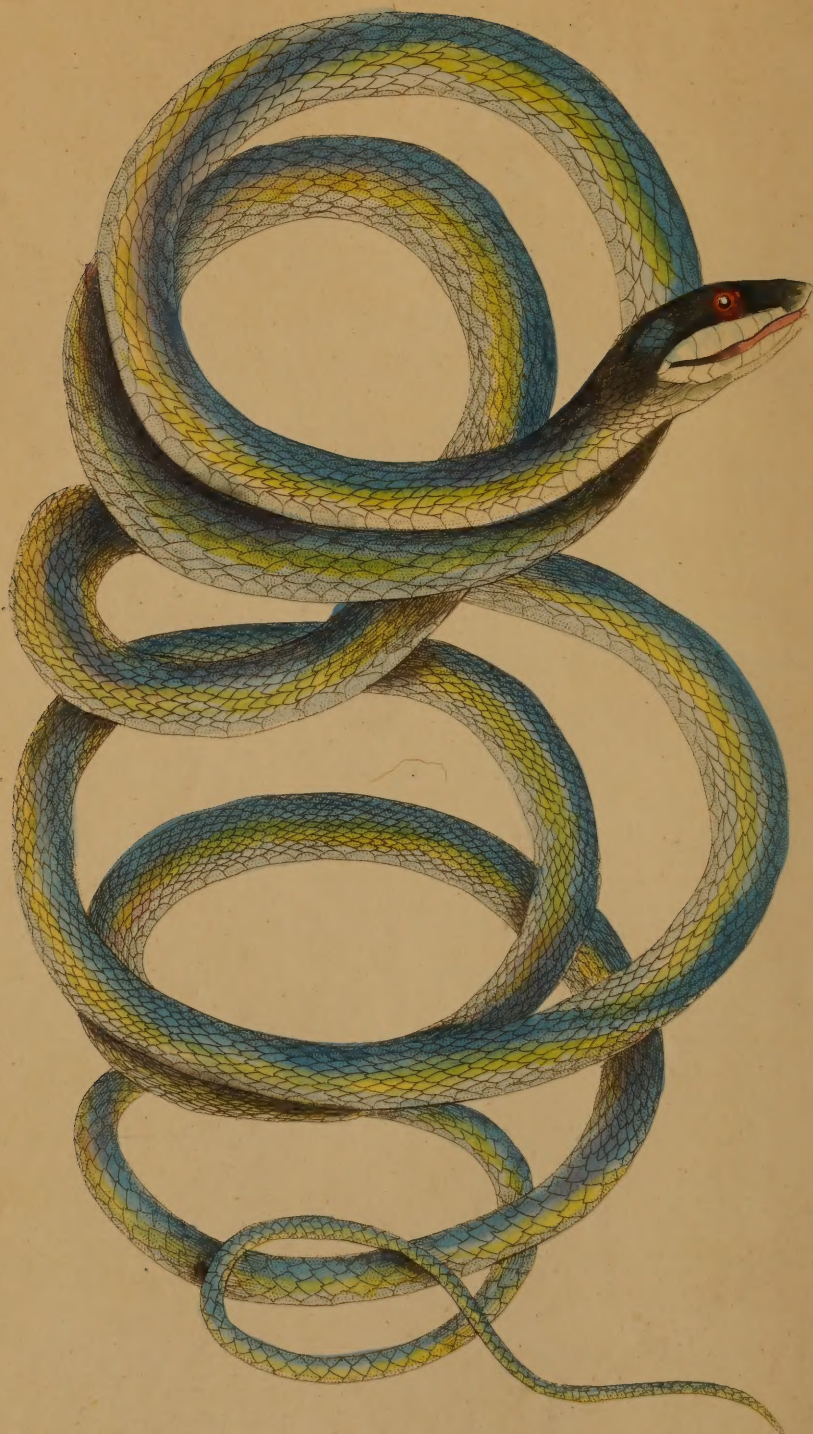
COLUBER VIRIDI-CÆRULEUS, subtus au-
reo-virescens, fascia transfoculari nigra.

Scut. abdom. circiter 164. Squam. subcaud. 150.

SERPENS ORNATISSIMA AMBOINENSIS
BOIGUATRARA.

Seb. Mus. 2. t. 82. f. 1.

In serpentibus examinandis noto illo adagio præcipue opus est, "*nimum ne crede colori.*" Huic enim generi adeo discolor est varietas, ut certioribus signis opus sit, quibus inter species facilius et tutius possit dijudicari. Serpentes tamen nonnulli sunt quibus color satis constans sufficit characteri specifico. Hujusmodi est coluber pulcherrimus in tabula depictus, cujus color fere semper sui est similis, et rarissime immutatur. Asiam et Americam? incolit, carens veneno; nec pertingit ad certam aliquam longitudinem; raro tamen tres pedes superat.



R.V.

London, Published May 1844, by F. P. Nichol & Co. 15, Broad Street.

THE GILDED SNAKE.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.

Broad alternate *Scales* under the tail.

SPECIFIC CHARACTER, &c.

GREENISH-BLUE SNAKE, gold-green beneath; with a black streak across the eyes.

Abdominal lamellæ about 164. *Subcaudal scales* about 150.

The GILDED SNAKE, or BOIGA.

The IRIDESCENT SNAKE.

Never, perhaps, can the well-known maxim "*nimum ne crede colori*" be more justly applied than to the animals of the serpent tribe; which, in general, exhibit so many variations in point of color, as to make it necessary to fix on some more certain marks of distinction, in order to ascertain with precision the respective species. There are, however, some serpents which seem less liable to this uncertainty than others, and which display a tinge sufficiently

ciently uniform to declare their specific character. Amongst these may be reckoned the beautiful snake figured on the present plate, which is pretty constantly found of the color represented. It is a native both of Asia and America? and is not of a poisonous nature. It is seen of various sizes, but seldom exceeds the length of about three feet.

CERTHIA CROCATA.



CHARACTER GENERICUS.

Rostrum arcuatum, tenue, subtrigonum, acutum.

Lingua acuta.

Pedes ambulatorii.

Lin. Syst. Nat. p. 184.

CHARACTER SPECIFICUS, &c.

CERTHIA OLIVACEO-FUSCA, capite aureo-viridi, gula violaceo-chalybeia, pectore abdomineque croceis, rectricibus duabus intermediis elongatis.

CERTHIA rectricibus intermediis duabus longissimis, corpore violaceo-nitente, pectore abdomineque luteis.

Lin. Syst. Nat. p. 188.

CERTHIA longicauda minor capitis Bonæ Spei.

Briff. 3. p. 649. t. 33. f. 6.

Cum in generibus Certhiæ Trochilique plurimæ contineantur species, eo fit ut unamquamque speciem non semper fatis denotet triviale nomen; præcipue si notabilis aliqua fuerit colorum immutatio. Aviculam nempe quam depinximus, triviali nomine,

parum fauste selecto, *violaceam* nuncupavit Lin-
næus; licet caput cum collo humerisque coloris sit
aureo-viridis saturatioris, fascia tantum violacea seu
cæruleo-chalybeia trans pectus superius ducta. Cum
autem insignis et conspicua distinctionis nota sit co-
lor pectoris et abdominis croceo-luteus, non dubi-
tavi avem novo nomine *crocatam* dicere. Africam
incolit *Certhia crocata*, amans præcipue promonto-
rium euelpidis. Naturalem magnitudinem ostendit
tabula.



S. A. W.

London, Published June 1795, by F. R. Nodder

26 N. 15 Brewer Street.

THE
SAFFRON CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, and sharp-pointed.

Tongue either sharp-pointed, ciliated, or tubular.

Legs moderately stout: toes three before and one behind: back toe large: claws hooked and long.

SPECIFIC CHARACTER, &c.

OLIVE-BROWN CREEPER, with gold-green head, steel-blue throat, saffron breast and abdomen, and long middle tail-feathers.

VIOLET-HEADED CREEPER.

Lath. Syn. 2. p. 178.

Le SOUI-MANGA à longue queue et à capuchon violet.

Buff. ois. 5. p. 517.

PETIT GRIMPEREAU à longue queue du Cap.
de B. E.

Pl. enl. 670. f. 2.

In the numerous genera of *Trochilus* and *Certhia*,
is not always that the most apposite and proper titles
have

nulli; cuius specimen constitit interdum emptori
centum aureis nummis.

His omnibus cedit longe species quam jam descri-
bimus: habet tamen suam nec mediocrem elegan-
tiam. Innascitur in oceano Americano.

Ante publicatum Systema Linnæanum vocari so-
litum est hoc genus nomine *Volutæ*; quod Linnæus
rectius, ut opinor, titulo *Coni* distinxit: similis enim
est major pars generis cono mathematico.



R. N.

London. Published June 1st 1898, by F. R. Nodder & Co. N. 15, Devon Street.

THE
MARBLED CONE.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell more or less conic or pyramidal.

Aperture longitudinal, linear, without teeth, entire at the base.

Pillar smooth.

SPECIFIC CHARACTER, &c.

PYRAMIDAL BROWN or BLACK CONE,
with ovate or trigonal-ovate white spots.

LE CORNET des COEURS.

Knorr. 1. t. 7. f. 4. 15. f. 2.

The BLACK and WHITE MARBLED CONE,

The shells of this genus are in general highly distinguished by the richness and variety of their colors, and are considered as constituting the principal beauties of conchyliological cabinets. Many species are also extremely rare and valuable, as the *C. araufiacus*, the *C. Ammiralis*, and its respective varieties;

varieties; particularly the *Ammiralis summus*, *A. occidentalis*, and above all the superb variety, if not distinct species, known by the title of *Cedo nulli*, of which a specimen has been sometimes valued at the price of an hundred guineas. The present species, though not comparable either in point of beauty or rarity to many others, is yet possessed of a very high degree of elegance. It is a native of the American ocean.

It should be observed that this genus, before the *Systema Naturæ* of Linnæus made its appearance, was distinguished by the name of *Voluta* or *Volute*; but Linnæus, with greater propriety, has applied the title of *Conus*; the outline of the shell, in most species, approaching very nearly to the mathematical figure of a cone.

LACERTA LUMBRICOIDES.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, nudum.

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS, &c.

LACERTA BIPES, cylindrica, ferruginea, sub-
tus pallida, striis quadratis tessellata, pedibus
tetradactylis brevissimis.

Ob nimiam quæ est inter genera *anguis* et *lacertæ* af-
finitatem, difficile admodum est species nonnullas, ni
paulo attentius in characteres inquiratur, ad verum et
sibi proprium genus relegare. Rem se ita habere satis
probant *lacerta Chalcides*, *lacerta anguina*, *anguis qua-*
drupes, et *anguis bipes*. Speciei quoque de qua jam agi-
tur, quæque non ita pridem phycis innotuit, eadem
est obscuri discriminis ambiguitas. Generat eam regio
Mexicana. Hanc primus descripsit Dominus Cope.
Summa ei generalis similitudo est cum *lacerta Chal-*
cide, nisi quod caudam habeat brevissimam, cum
Chalcidis sit longissima; sulceturque corpus utrinque
linea in longitudinem ducta quæ dividit abdomen a
dorso; qua caret *Chalcides*, cujus squamæ non in-
interruptæ et annulatæ per totum corporis truncum

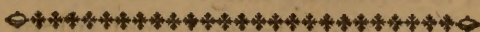
Q

conti-

continuantur. Color *lacertæ lumbricoidis* est ferrugineo-fusco-pallidissimus. Squamæ quasi oblongo-quadratae. Caput laminis magnis squamosis veluti scutatum. Oculi minimi. Specimen quod descripsit Dominus Ceppe, octo uncias superabat; nostrum, quod in Museo Britannico asservatur, vix quatuor.



THE
LUMBRICIFORM LIZARD.



GENERIC CHARACTER.

Body (in most species) four-footed, tailed, naked.

SPECIFIC CHARACTER, &c.

TWO-FOOTED CYLINDRIC FERRUGINOUS LIZARD, pale beneath; tessellated with square streaks, and furnished with very short tetradactylous feet.

LA CANNELE.

Cepede Quadr. Ovip. 1. p. 613.

Between the genera of *Anguis* and *Lacerta* there is so close an alliance, that some species exist which at first view have a doubtful appearance, and might seem with equal propriety to be referred to either. Of this the *Lacerta Chalcides*, *Lacerta anguina*, *Anguis bipes*, and *Anguis quadrupes*, may be adduced as remarkable examples. The species now represented is also of a similar cast, and bears the same ambiguous appearance. It is a native of Mexico, and has but lately been introduced to the knowledge of European Naturalists. It was first described by

by the Count de Cepede. It bears a great general resemblance to the *Lacerta Chalcides*, but differs in having a very short tail; whereas that of the *Chalcides* is extremely long. Each side of the body is also marked by a longitudinal fulcus or line of division separating the upper part or back from the under surface. In the *Chalcides* there is no such division, but the scales are continued in complete annular series round the trunk. The color of this curious animal is a very pale ferruginous brown. The scales are of a lengthened square form. The head is covered by large scaly plates. The eyes are extremely small. The specimen described by the Count de Cepede was upwards of eight inches in length; but the individual here represented, and which is now in the British Museum, is scarcely more than half that length.

CORVUS PERUVIANUS.



CHARACTER GENERICUS.

Rostrum convexum, cultratum.

Nares pennis fetaceis recumbentibus obtectæ.

Lingua cartilaginea, bifida.

Pedes ambulatorii.

Lin. Syst. Nat. p. 155.

CHARACTER SPECIFICUS, &c.

CORVUS VIRIDIS, fronte cærulea, vertice albo,
gula pectoreque superiore atris, abdomine
rectricibusque lateralibus flavis.

CORVUS PERUVIANUS.

Lath. ind. orn. p. 161.

Lin. Syst. Nat. Gmel. 1. p. 373.

Magnitudine corvo cristato Linnæi fere æqualis inter aves pulcherrimas jure sibi locum vindicat Corvus Peruvianus; qui maxima ex parte læte viret, fronte colloque postico cæruleis; longe tamen saturatiore colore frontis. Occiput albet. Gula pectusque superius holoserico-nigra. Abdomen totum cum tribus rectricibus exterioribus nitidissime flavum. Rostrum pedesque nigricant.



THE
PERUVIAN JAY.



GENERIC CHARACTER.

Bill convex, cultrated.

Nostrils covered by setaceous recumbent feathers.

Tongue cartilaginous, bifid.

Feet formed for walking.

SPECIFIC CHARACTER, &c.

GREEN JAY, with blue front, white crown;
throat and upper part of the breast black; ab-
domen and lateral tail-feathers yellow.

The PERUVIAN JAY.

Lath. Syn. 1. p. 391.

Le GEAI du PEROU.

Buff. ois. 3. p. 116.

Pl. enl. 625.

The Peruvian Jay is one of the most beautiful of birds. Its size is nearly that of the *corvus cristatus* or blue jay of America. The general color of the bird is an elegant light green: the frontlet and

back part of the neck are blue; the former much deeper than the latter. The back part of the head is white; the throat and upper part of the breast deep velvet-black; the whole abdomen and the three exterior rectrices or tail-feathers on each side of a rich jonquil yellow; the beak and legs are blackish.

ASCIDIA FASCICULATA.



CHARACTER GENERICUS.

Corpus fixum, teretiusculum, vaginans.

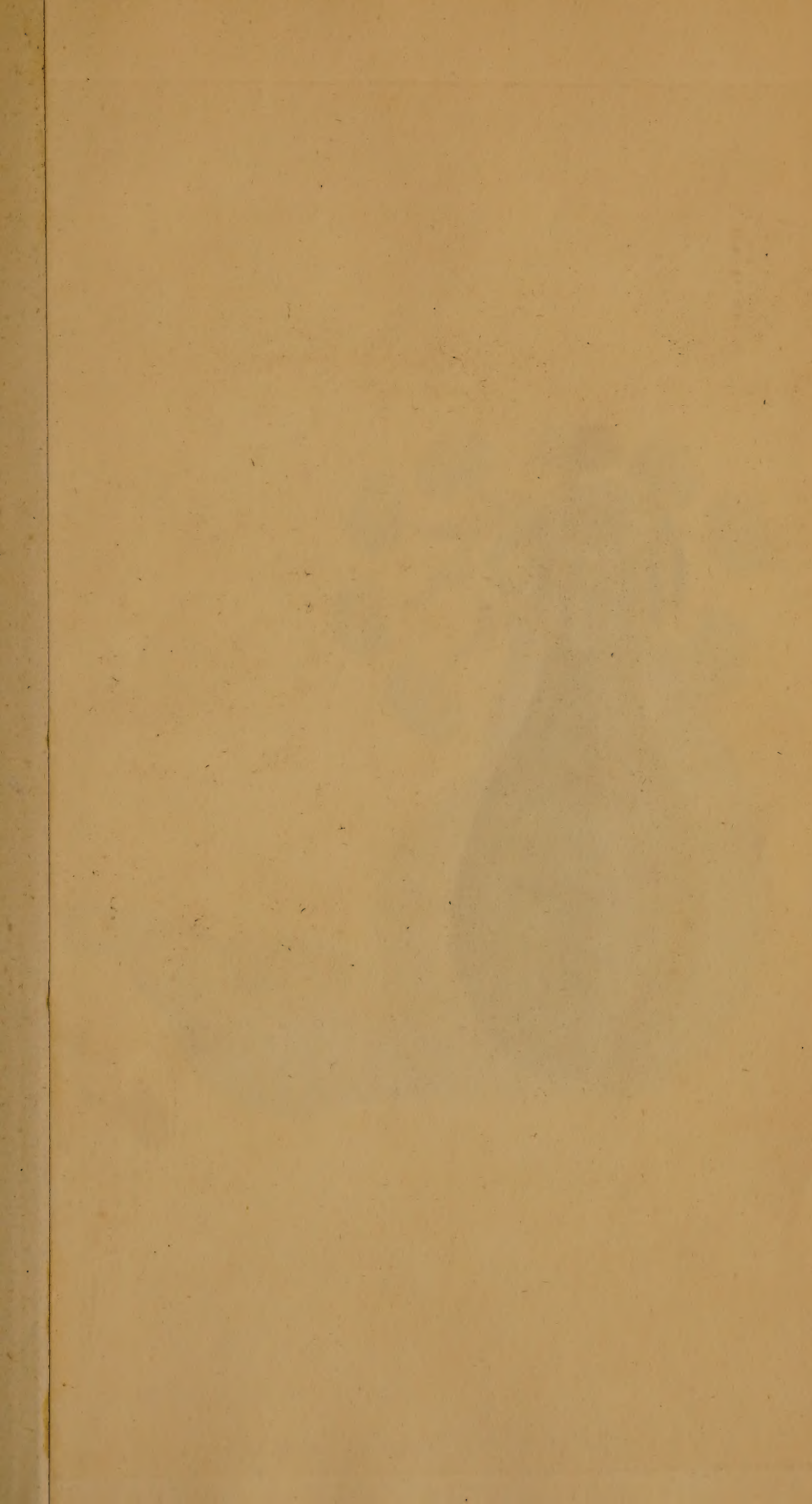
Apertura binæ, ad summam; altera humiliore.

Lin. Syst. Nat. p. 1087.

CHARACTER SPECIFICUS, &c.

ASCIDIA? pyriformis subferruginea subpilosa,
apertura tentaculis decem apice frondoso-fasciculatis.

Caret Systema Linneanum pereleganti hac animalis marini specie, quam generant maria Indica et Americana. Reti illaqueatum est specimen quod depinximus juxta litora parvulæ cujusdam insulæ non longe a Borneo distantis. Ostendit tabula secunda ascidiam fasciculatam aquam ab ore emittentem, contracto corpore; quod commune ei est cum reliquo genere, si turbetur aut irritetur. Paucis abhinc annis prodiit figura hujus animalis miro artificio exsculpta auspiciis Domini Martyn, qui præclaro suo opere, iconas concharum australium continente, merito inclaruit.







N

THE
FASCICULATED ASCIDIA.



GENERIC CHARACTER.

Body fixed, more or less cylindric, vaginant.

Apertures two, commonly seated near the top:
one lower than the other.

SPECIFIC CHARACTER, &c.

PYRIFORM SUBFERRUGINOUS and SUB-
PILOSE ASCIDIA? with the aperture sur-
rounded by ten fasciculated tentacula.

The elegant marine animal represented in the annexed plates, seems to be one of those species which have not yet been introduced into the *Systema Naturæ* of Linnæus. It is a native of the Indian and American seas. The individual specimen now figured was drawn up by a net in fishing off the coasts of a small island at no great distance from Borneo. Like others of its genus, when disturbed, it contracts the body, as represented on the last plate, and ejects the contained fluid from the superior orifice or mouth. It remains to be observed, that a highly-elegant engraving

engraving of this animal was some years since
executed under the care of Mr. Martyn, ^{Marshall, A. R. Nodder} so well
known for his exquisitely conducted work on the
South-sea shells.

SIMIA HAMADRYAS.



CHARACTER GENERICUS.

Dentes Primores utrinque quatuor, approximati.

Laniarii solitarii longiores, hinc remoti.

Molares obtusi.

Lin. Syst. Nat. p. 34.

CHARACTER SPECIFICUS, &c.

SIMIA cinerea, capite humerisque comosis, natibus calvis, cauda elongata apice floccosa.

SIMIA caudata cinerea, auribus comosis, unguibus acutiusculis, natibus calvis.

Lin. Syst. Nat. p. 36.

SIMIA cynocephalus ad utramque aurem magna coma.

Alp. Ægypt. p. 284.

Simiam ostendit tabula vultu supra modum ridiculo, ingenio feroci. Generant eum calidiores Africæ regiones, superantem interdum altitudine quinque pedes. Depingi curavimus ipsissimam vivi animalis similitudinem,

THE
GREY BABOON.



GENERIC CHARACTER.

Front-Teeth in each jaw four, approximated.

Canine-Teeth solitary, long, distant.

Grinders obtuse.

SPECIFIC CHARACTER, &c.

GREY BABOON, with long flowing hair on the head and shoulders, and elongated tufted tail.

DOG-FACED BABOON.

Pennt. Quadr. 1. p.

In this remarkable animal, to the most highly grotesque appearance is superadded a great degree of ferocity. It is a native of the warmer parts of Africa, and attains the height of more than five feet. The present figure is a very exact portrait from the living animal.



London, Published Aug. 21. 1795, by F. & J. Vodder & Co. N^o. 15 Brewer Street.

HIRUDO MEDICINALIS.



CHARACTER GENERICUS.

Corpus oblongum, promovens se ore caudaque in orbiculum dilatandis.

Lin. Syst. Nat. p. 1079.

CHARACTER SPECIFICUS, &c.

HIRUDO olivario-nigricans, supra lineis sex flavo-ferrugineis, subtus nigro flavoque varia.

HIRUDO depressa nigricans, supra lineis flavis sex; intermediis nigro arcuatis, subtus cinerea nigro maculata.

Lin. Syst. Nat. p. 1079.

HIRUDO elongata nigricans: supra lineis versicoloribus, subtis maculis flavis.

Lin. Syst. Nat. Gmel. 1. p. 3095.

HIRUDO SANGUISUGA.



CHARACTER SPECIFICUS, &c.

HIRUDO depressa fusca; margine laterali flavo.

Lin. Syst. Nat. p. 1079.

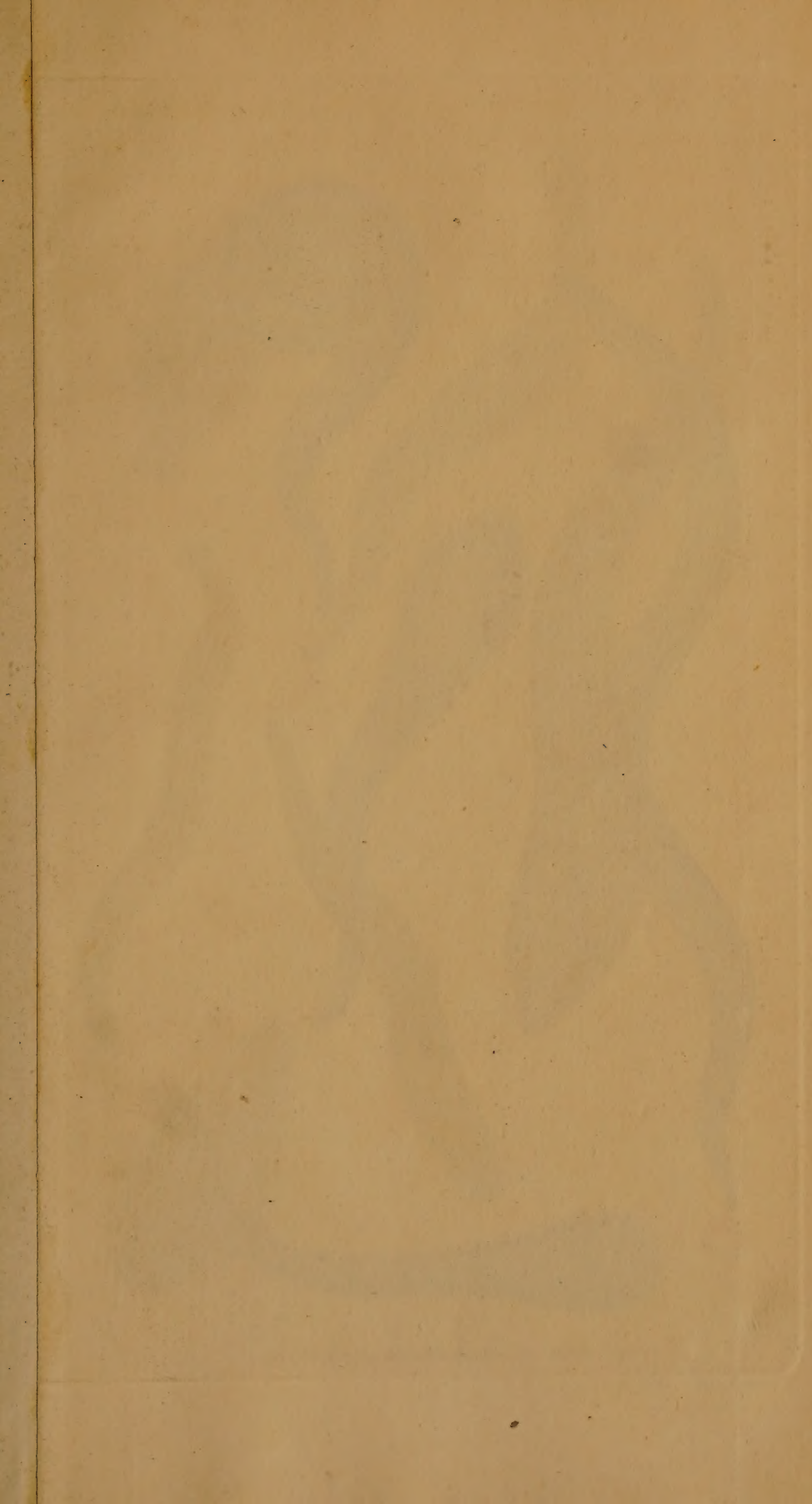
HIRUDO maxime vulgaris.

Raj. inf. 3.

Hirudinum duas præcipuas species generat Britannia, sanguisugam scilicet seu majorem, et medicinalem seu striatam. Licet interdum confundantur, facile tamen inter eas est discrimen, si notis specificis satis attendimus. Sanguisuga superficiem superiorem semper habet olivario-nigricantem, colore magis minusve saturato; inferiorem sordide ochraceam; quo etiam colore tinguntur latera, adeo ut margo utrinque angustissima efficiatur. Vulgatissima est hæc species in fossis aquisque stagnantibus per totam æstatem, crescitque sæpe in longitudinem sex vel septem unciarum. Striatæ autem, quæ rarissime ad hanc magnitudinem pertingit, major est colorum elegantia. Supra nigrat levissime olivaria, lineisque seu fasciis sex longitudinalibus ochraceis et interdum ferrugineis notatur, quarum duas utrinque exteriores interrumpit series macularum oblongarum nigrarum, cum reliquæ duæ maculis plane careant. Infra nigerrima maculis magnis ochraceis inæqualibus duplici serie in longitudinem ductis distinguitur. Motibus corporis moribusque ambæ species conveniunt. Ambæ quoque viviparæ sunt, fœtusque autumnò edunt. Dentes hirudinibus sunt tres leviter cartilagei, cumque siti sint ut inter mordendum invicem convergant, vulnus fere triangulum cuti imprimunt. Constat cauda ex musculo orbiculato seu sphinctere, cujus ope facillime et secure se affigunt corpori omni cui volunt adhærere.

Hirudines dissectæ tantum non renascuntur. Sanguisugam non semel mediam divisi, vidique partes exactas, etiam elapsis aliquot septimanis, adhuc vi-

vas valentesque, nullo alio adhibito nutrimento præter quod ab aqua absorpserant. Extremitates vulneratæ magis magisque rotundatæ indies videbantur, et ad redintegrationem properantes; quam tamen nunquam attingebant, sed paulo post gradatim morientes contabuerunt. Minoribus autem speciebus eadem fere est renovationis facultas cum ipsis hydriis, possuntque illæ facillime et certissime dividendo multiplicari.





A. 17

London, Published Aug^r 1795 by T. B. Nodder & G. A. 15. Bowyer Street.



THE
MEDICINAL LEECH.



GENERIC CHARACTER.

Body oblong, more or less depressed; moving by dilatation and contraction.

SPECIFIC CHARACTER, &c.

OLIVE-BLACK LEECH with six yellow-feruginous lines on the upper surface; the lower variegated with black and yellow.

The MEDICINAL LEECH.

THE
HORSE LEECH.



SPECIFIC CHARACTER, &c.

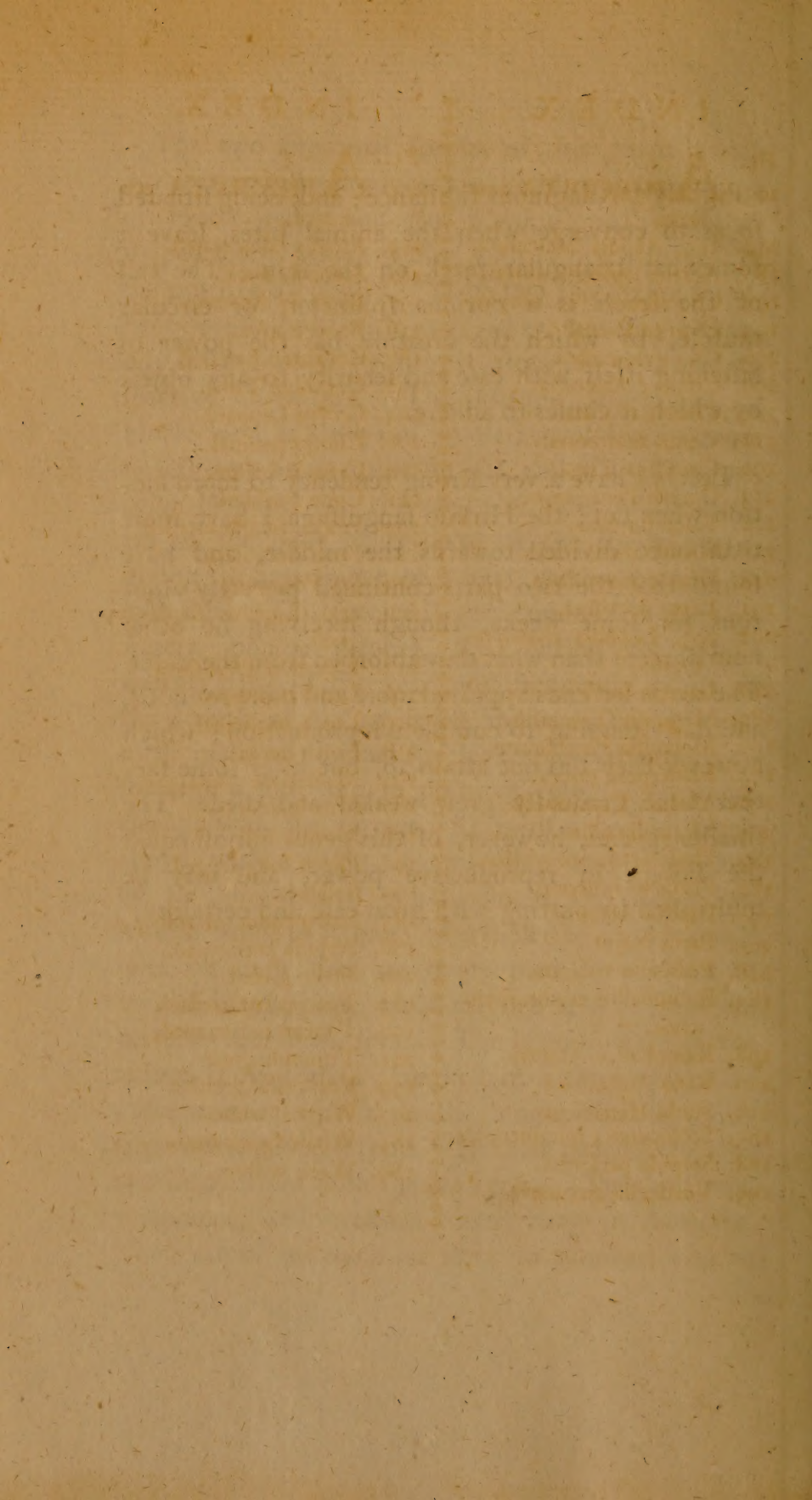
OLIVE-BROWN LEECH with an ochre-coloured marginal band.

The HORSE-LEECH.

The two principal species of this genus which our own country produces are the *Hirudo sanguifuga* or Horse-leech, and the *Hirudo medicinalis* or striped leech, which is used with so much success in the practice of physic. These two species are sometimes confounded with each other, but may be readily distinguished by proper attention to their respective characters. The *Hirudo sanguifuga* or Horse-leech is always of an olivaceous-black, more or less deep on its upper surface, and of a dull ochre-color beneath, and the edges or sides of the body are of the same ochre-color as the lower parts; giving the appearance of a very narrow margin on each side. This species is very common in stagnant waters, ponds, ditches, &c. during the whole warmer parts of the year, and frequently grows to the length of six or seven inches. The *Hirudo medicinalis* or officinal species scarce ever attains to so large a size, and in point of color is far more elegant than the former. It is of a deepish black above, with a slight tinge of olive, and is marked by six longitudinal ochre-colored and sometimes reddish bands or stripes: of which the two exterior ones on each side are interrupted by a chain of longish black spots, while the two middle ones are perfectly free from spots. The lower surface of the animal is deep-black, marked in a somewhat irregular manner with a double longitudinal series of large ochre-colored spots. In their general motions and dispositions both species agree. They are both viviparous, and produce their young in Autumn. The teeth of the leech are three in number, and of

a slightly cartilaginous substance ; and, being situated so as to converge when the animal bites, leave a somewhat triangular mark on the skin. The tail of the leech is a curious sphincter, or circular muscle, by which the creature has the power of fastening itself with ease and security to any object by which it chuses to adhere.

Leeches have a very strong tendency to reproduction when cut : the *Hirudo sanguifuga* I have more than once divided towards the middle, and have found that the two parts continued perfectly vigorous for some weeks, though receiving no other nourishment than what they absorbed from the water. The wounded ends appeared more and more rounded, and daily tending to complete reproduction ; which however they did not attain to, but after some farther time gradually grew weaker and died. The smaller species, however, of this genus almost equal the Polype in reproductive power, and may be multiplied by cutting with great ease and certainty.



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